

Helitowcart - DESIGN CHANGE REQUEST-ORDER (ECR/ECO)	F20-01	Page 1 of 3
Reviewed & approved by:	/	2006 09 09

A- REQUEST

BP350

ECR : —

ECO : 6

Nature of proposed change :	NEED INSTRUCTION TO REPAIR PADS TO ALLOC FIT WITH DART WEAR SHOE BOOTS (INSTR. FOR GRINDING)
Reason :	BOOTS KEEP FROM PROPERLY RESTING ON PAD.
Submitted By :	CCANDE BOOCHE, HELI CAN / DP
Date :	2015 02 06

B- IMPACT ANALYSIS

Product Manager	Signature :  /date : 2015 02 06
Operation Manager	Signature :  /date : 2015 02 06
Quality System Manager	Signature :  /date : 2015 02 06
Regulatory affairs Manager	Signature :  /date : 2015 02 06
Supplier A	Signature : _____ /date : _____
Supplier B	Signature : _____ /date : _____
Other	Signature : _____ /date : _____

C- DECISION

Risk analysis	No particular risk associated with the suggested change.	
	Signature : 	/date : 2015 02 06

Decision	ISSUE AN EO THAT ALLOWS MECHANICS TO SLIGHTLY GRIND PADS WHERE WEAR SHOE BOOTS RUB AGAINST THEM IN ORDER TO GIVE THEM THE MISSING SPACE THEY NEED. EO TO BE APPLIED BY MECHANICS OR NEED Signature : 	/date : 2015 02 06 0024.
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D- ACTION PLAN

Action	Resp	Due date :	Verified by :
1) Get Aciatech & Po	DB	2015 02 06	DB
2) Get info from Can Tech	DB	2015 02 -	DB
3) Identify Grinding Method	Aciatech	2015 04 06	DB
4) Issue EO	Aciatech	2015 04 06	DB
5) Transmit EO to customer	DB	2015 04 07	DB
6) ADD EO to all stocks <small>INSTRUCTION (SEE ATTACHED RECORD)</small>	DR	2015 04 10	DB
7) ADD EO to typical tools point NB 2015 04 10	DB	2015 04 10	DB
8) Records EO for closure	DB	2015 04 10	DB

Effective date :	2015 04 02	Effective lot no : <u>A14</u>	in stock at issue: LNF-130102-01 (#14) LDF-141114-01 (#3 to 16) d ALL THE ones AT CANTECH
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Helitowcart - DESIGN CHANGE REQUEST-ORDER (ECR/ECO)	F20-01	Page 3 of 3
Reviewed & approved by:	/	2006 09 09

E- VERIFICATION

Verified Elements :	By/ date :
Instruction provides appropriate info to adapt pad to damage caused by DART Grid bolt.	DB 2015 06 12

F- VALIDATION

Validated Elements :	By/ date :
Instruction meets needed action to repair pads.	DB 2015 06 12

G- CLOSURE

I confirm that the designated change has been performed successfully :

Signature : A. Daellen /date: 2015 06 12



INTEGRATED INTO ALL BOXES
IN STOCK AT DATE OF ISSUE

877A, Alphonse-Desrochers
St-Nicholas, Lévis, Québec
Canada G7A 5K6

LN-130202-01 Box: 14

LN-141114-01 Box: 3 TO 16

Engineering Order

DRS

NOT SENT TO CESSNS
ALREADY ON MARKET
OTHER THAN CANHELI

Title:
Repair of BearPaw BP350 for Installation with Dart Wear Pads

EO Number:
HTC-EO-0709-003 Rev NC **Date issued:**
April 02, 2015

Customer: **Project number:**
Aviatech (ATS) A2007-09

BEARPAW INFORMATION

Part Number / Description:
314-0018-01-S / BP350 Pad Streamline **Drawing:**
314-0018-01-S, Rev D, dated December 21, 2012

SIGNATURE

Prepared by:	Mechanical:	Electrical:	Verified:	Approved:
R. Berthelot, Eng. (OIQ# 5033095) Aviatech (ATS)	R. Berthelot, Eng. (OIQ# 5033095) Aviatech (ATS)		J.-F. Lemire, Eng. (OIQ# 141774) Aviatech (ATS)	Mirko Zgela (DAR #310) Aviatech (ATS)

SCOPE:

Aviatech Technical Services (ATS) has been contracted by Helitowcart to develop a repair procedure that aims at removing interference between BearPaw BP350 and Dart wear pad bolt heads. This Engineering Order (EO) describes the step-by-step approach to perform this repair and evaluates structural compliance of the repaired BearPaw.

REFERENCES DOCUMENTS:

The following documents is needed to carry out the modification:

[1] 314-0020-00-E, BearPaw Model BP350 – Installation Instruction – AS350/355 Series, Rev F, dated December 21, 2012.

GENERAL:

All steps in this procedure must be followed. Any deviations or enquiries related to the process are to be forwarded to Aviatech Technical Services at (819) 601-8049 for approval prior to performing the modification.

SAFETY:

The use of proper safety equipment and safe work environment is required at all time.

SPECIAL TOOLS:

- Dremel rotary tool
- Carbide end mill, 1/8" shank diameter, 1" length of cut, overall length 3"
(P/N 3066A59 from Mc Master Carr or equivalent)

DESCRIPTION OF CHANGE:

When BearPaw BP350 is installed on a skid equipped with Dart wear pads, interference occurs between bolt heads and BearPaw (Figure 1). This can damage the BearPaw, as shown on Figure 2. Damages on this figure were obtained directly after first installation, without performing any landing.

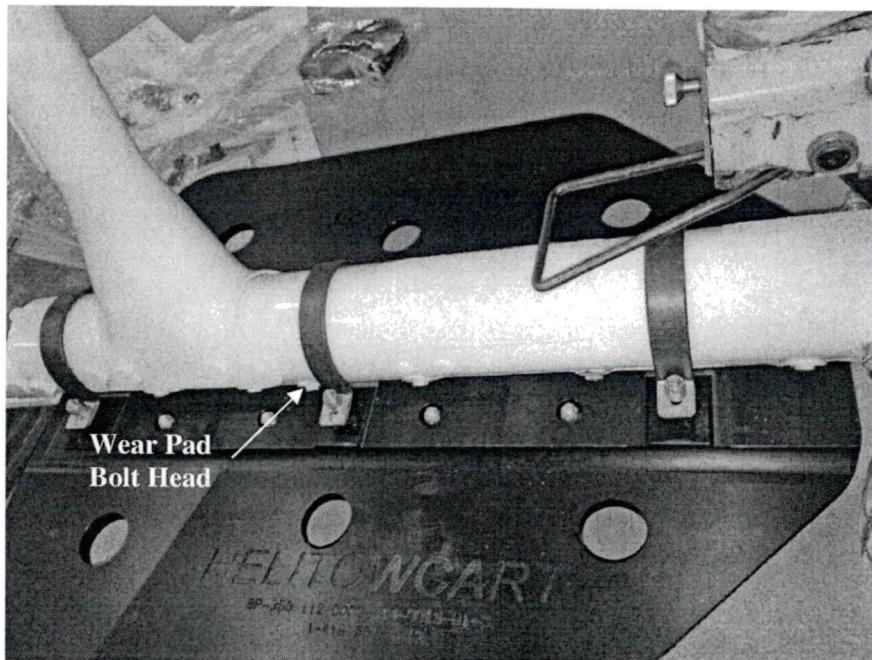


Figure 1 – BearPaw BP350 Installed with Dart Wear Pads

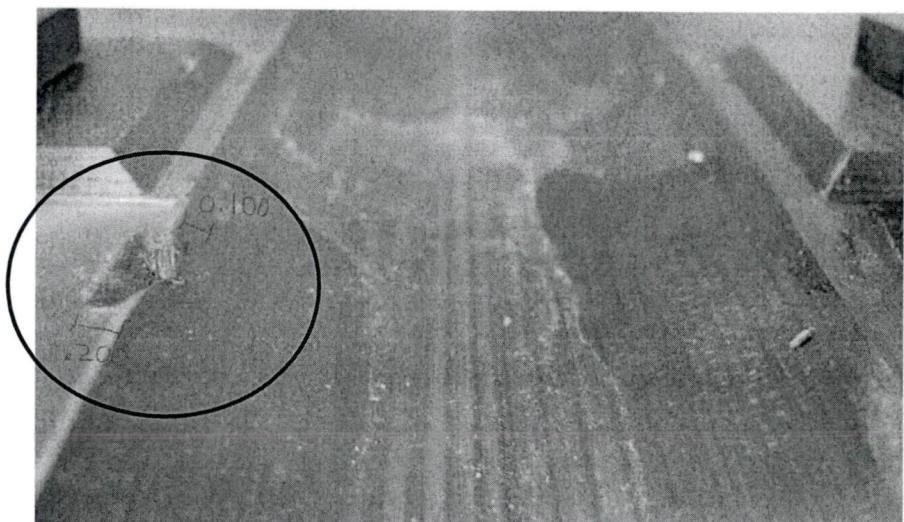


Figure 2 – Damages caused by Bolt Head Interference after first Installation

Repair consists in cutting small pockets in the BearPaw to clear the wear pad bolt heads (Figure 3).

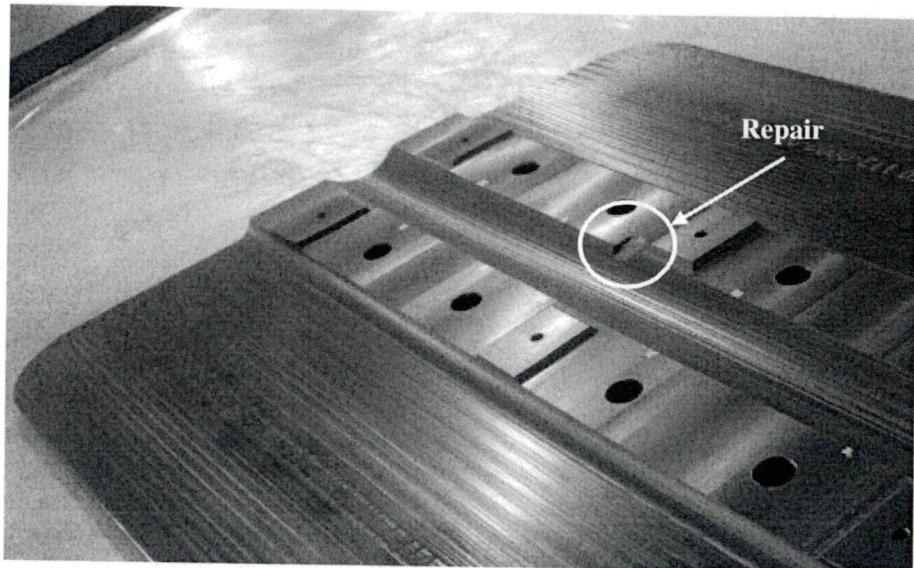


Figure 3 – Repair on BearPaw BP350

STRUCTURAL SUBSTANTIATION:

Structural substantiation of streamline BearPaw BP350 is performed in document HTC-MEM-0709-001 Rev A. Figure 4 is taken from this report and shows that equivalent stress is small in the region where the repair is performed since BearPaw thickness in this region is much larger than in the critical regions. Stress in this region for the repaired BearPaw will remain below stress in the critical region. Therefore, repair is structurally adequate.

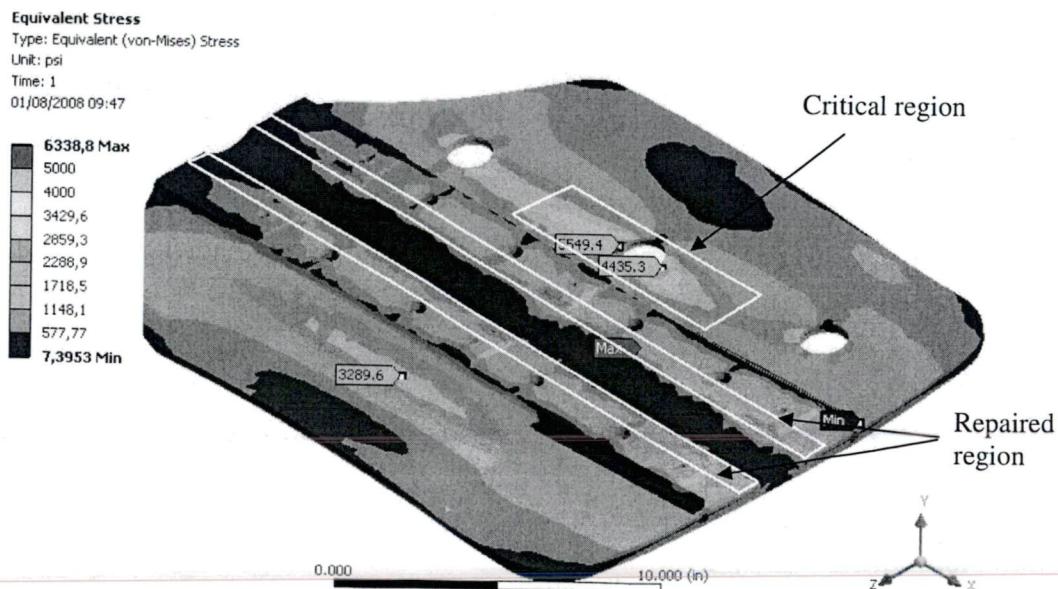
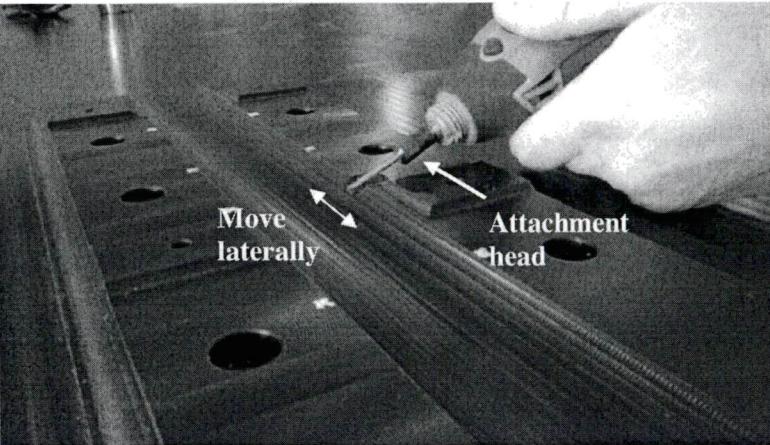


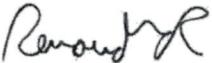
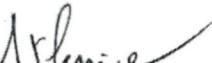
Figure 4 – Structural Substantiation – BearPaw BP350 Streamline Equivalent Stress

REPAIR PROCEDURE:

Step#	Description	Product / Tool	Sign /Date
1.0	Initial Helicopter Preparation		
1.1	Prior to equipment installation, ensure that the helicopter is safe for maintenance.		
2.0	BearPaw Removal		
2.1	Mark on BearPaws the locations of wear pad bolts that interfere with BearPaw or could eventually damage it.		
2.2	Remove BearPaws from helicopter skid as per installation instructions.		
3.0	BearPaw Repair		
3.1	Remove all components from BearPaw pads.		
3.2	Repair BearPaw pads based on the following dimensions. 	Dremel End mill	
	NOTE Only repair BearPaws at locations where damage occurred, or where damage could eventually occur. Reduce above dimensions as required, except radius.		

Step#	Description	Product / Tool	Sign /Date
	<p>NOTE</p> <p>Move <i>Dremel</i> laterally as shown on below picture. Do not move forward and aft of it would mark lines on the surface.</p>  <p>NOTE</p> <p>Recommended tool is a CNC like rotary tool (carbide end mill, 1/8" shank diameter, 1" length of cut, overall length 3"). The long length of cut is required in order to machine the surface laterally without moving the tool forward and aft. The long overall length is required to clear BearPaw surface with attachment head.</p> <p>The use of the following tools is NOT recommended for the repair since they were tested and melt BearPaw surface:</p> <ul style="list-style-type: none"> • Sanding rotary tool • Drill bit used with rotary tool • Half round wood file • Ball nose end mill 		
4.0	BearPaw Installation		
4.1	Install BearPaws on helicopter skid as per installation instructions.		

Engineering Order

Title: Repair of BearPaw BP350 for Installation with Dart Wear Pads				
EO Number: HTC-EO-0709-003 Rev NC		Date issued: April 02, 2015		
Customer:		Project number: A2007-09		
BEARPAW INFORMATION				
Part Number / Description: 314-0018-01-S / BP350 Pad Streamline		Drawing: 314-0018-01-S, Rev D, dated December 21, 2012		
SIGNATURE				
Prepared by:  R. Berthelot, Eng. (OIQ# 5033095) Aviatech (ATS)	Mechanical:  R. Berthelot, Eng. (OIQ# 5033095) Aviatech (ATS)	Electrical:  J.F. Lemire, Eng. (OIQ# 141774) Aviatech (ATS)	Verified:  Mirko Zgela (DAR #310) Aviatech (ATS)	Approved:  Mirko Zgela (DAR #310) Aviatech (ATS)
SCOPE: Aviatech Technical Services (ATS) has been contracted by Helitowcart to develop a repair procedure that aims at removing interference between BearPaw BP350 and Dart wear pad bolt heads. This Engineering Order (EO) describes the step-by-step approach to perform this repair and evaluates structural compliance of the repaired BearPaw.				
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SAFETY: The use of proper safety equipment and safe work environment is required at all time.				
SPECIAL TOOLS: <ul style="list-style-type: none"> • <i>Dremel</i> rotary tool • Carbide end mill, 1/8" shank diameter, 1" length of cut, overall length 3" (P/N 3066A59 from Mc Master Carr or equivalent) 				

DESCRIPTION OF CHANGE:

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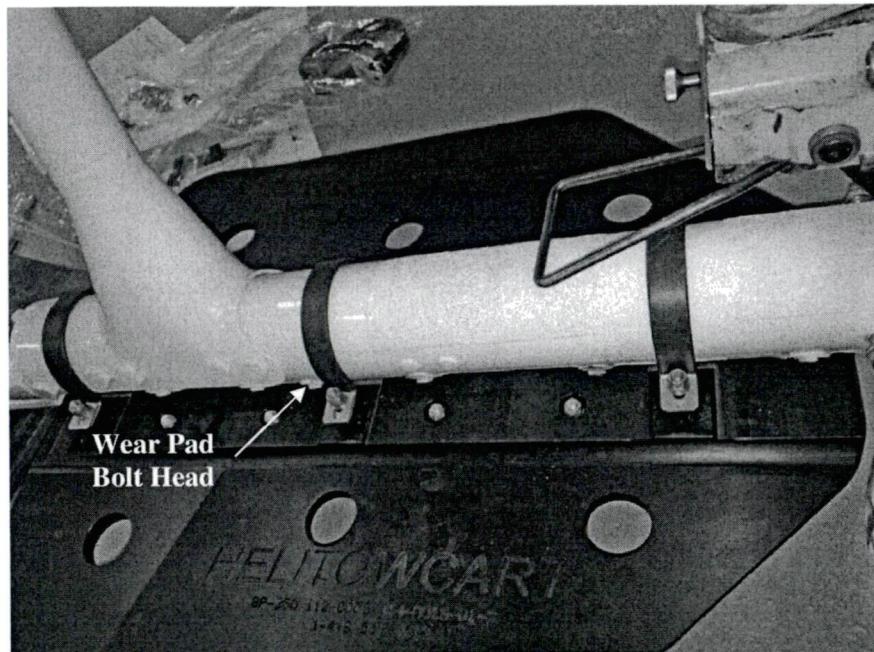


Figure 1 – BearPaw BP350 Installed with Dart Wear Pads

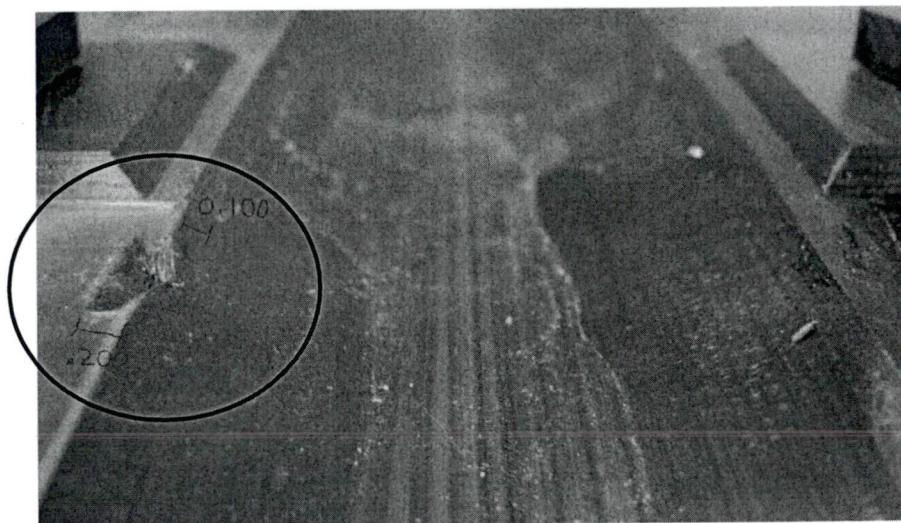


Figure 2 – Damages caused by Bolt Head Interference after first Installation

Repair consists in cutting small pockets in the BearPaw to clear the wear pad bolt heads (Figure 3).

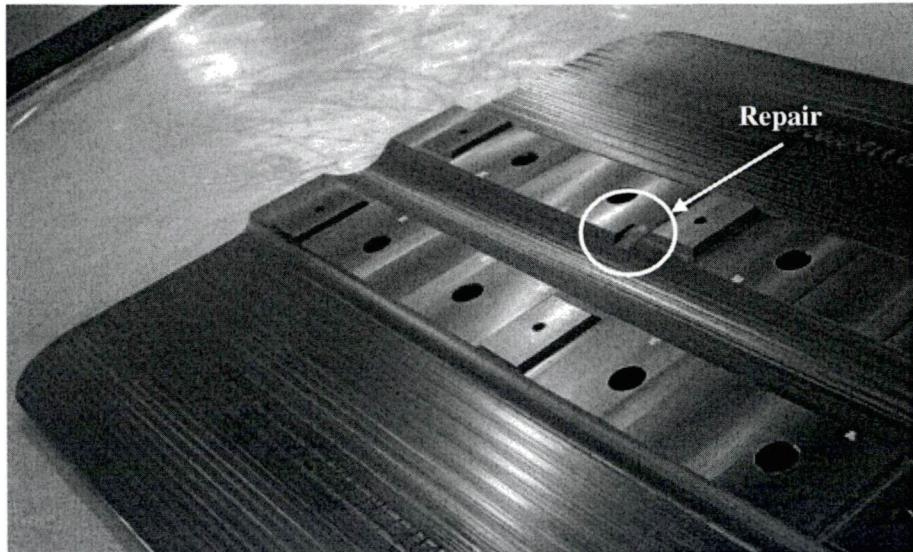


Figure 3 – Repair on BearPaw BP350

STRUCTURAL SUBSTANTIATION:

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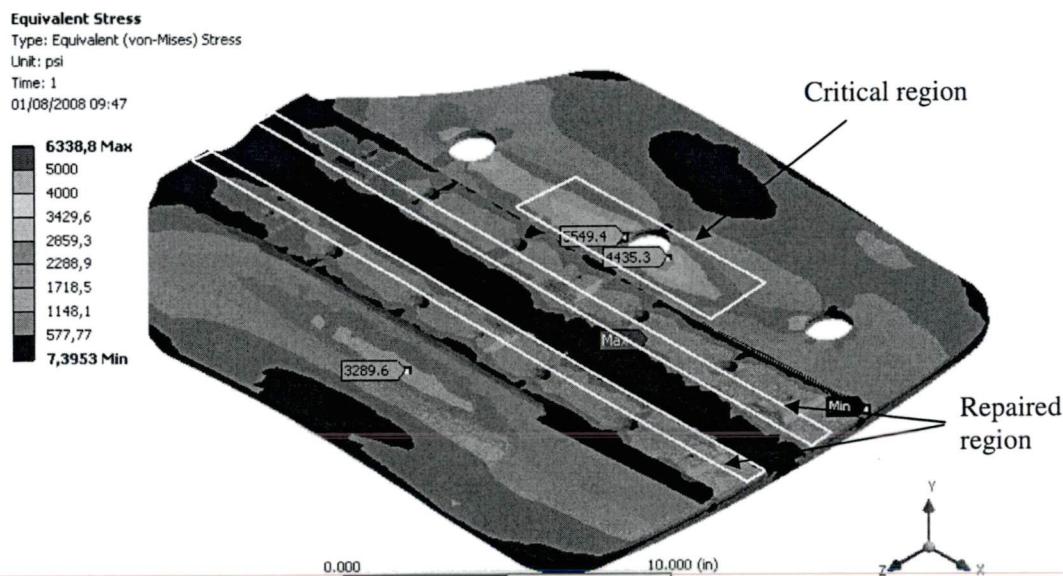
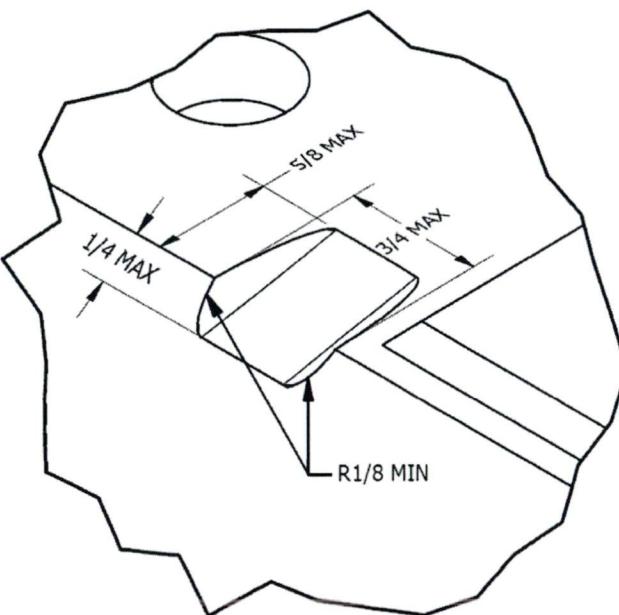
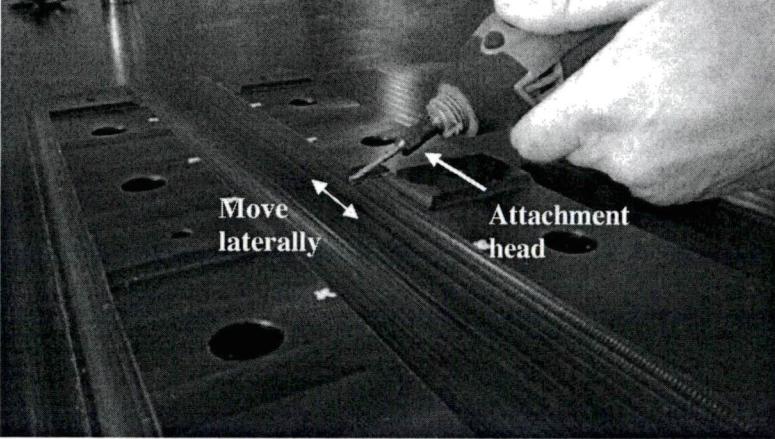


Figure 4 – Structural Substantiation – BearPaw BP350 Streamline Equivalent Stress

REPAIR PROCEDURE:

Step#	Description	Product / Tool	Sign /Date
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3.1	Remove all components from BearPaw pads.		
3.2	Repair BearPaw pads based on the following dimensions.  <div style="border: 1px solid black; padding: 5px; text-align: center;"> NOTE Only repair BearPaws at locations where damage occurred, or where damage could eventually occur. Reduce above dimensions as required, except radius. </div>	<i>Dremel</i> End mill	

Step#	Description	Product / Tool	Sign /Date
	<p>NOTE</p> <p>Move <i>Dremel</i> laterally as shown on below picture. Do not move forward and aft of it would mark lines on the surface.</p> 		
	<p>NOTE</p> <p>Recommended tool is a CNC like rotary tool (carbide end mill, 1/8" shank diameter, 1" length of cut, overall length 3"). The long length of cut is required in order to machine the surface laterally without moving the tool forward and aft. The long overall length is required to clear BearPaw surface with attachment head.</p> <p>The use of the following tools is NOT recommended for the repair since they were tested and melt BearPaw surface:</p> <ul style="list-style-type: none"> • Sanding rotary tool • Drill bit used with rotary tool • Half round wood file • Ball nose end mill 		
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4.1	Install BearPaws on helicopter skid as per installation instructions.		

4

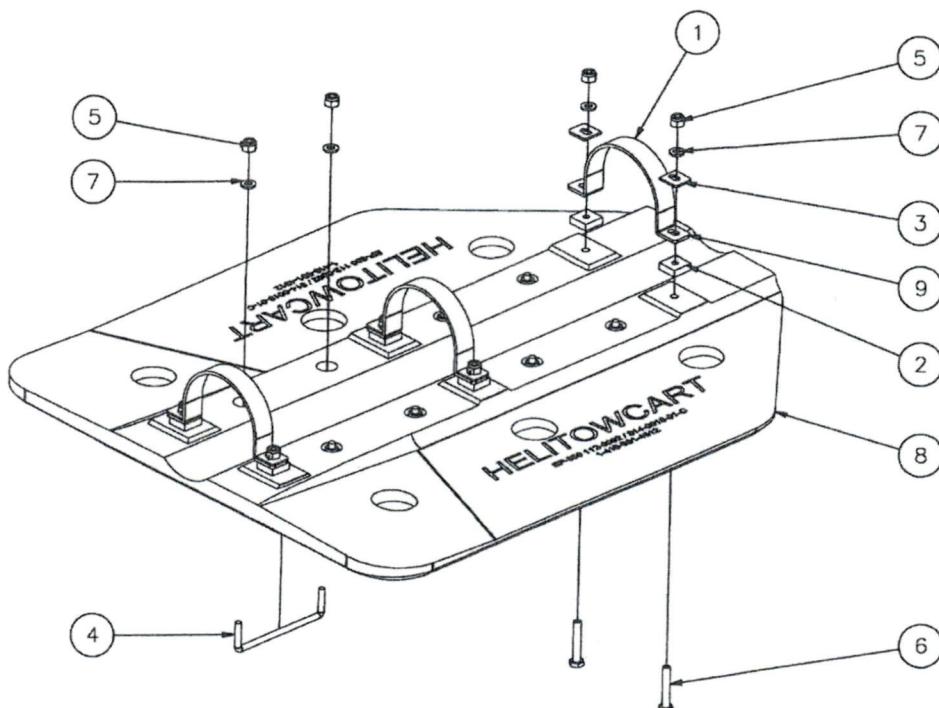
3

2

1

DRAFT No 112-0002-00-5

1 OF 1



1	REWORKABLE	2	NONREWORKABLE	3	NOTED	4	NA
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ZONE	REV	DESCRIPTION					
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A		ADDITION OF STREAMLINE PAD CONFIGURATION					
---	--	--	--	--	--	--	--

B		ADDITION OF VENT HOLES ON THE STREAMLINE PAD					
---	--	--	--	--	--	--	--

C		MODIFICATION OF VENT HOLES ON THE STREAMLINE PAD					
---	--	--	--	--	--	--	--

D		DELETED REVISIONS IDENTIFICATION IN PART NUMBER					
---	--	---	--	--	--	--	--

21 DEC 2012

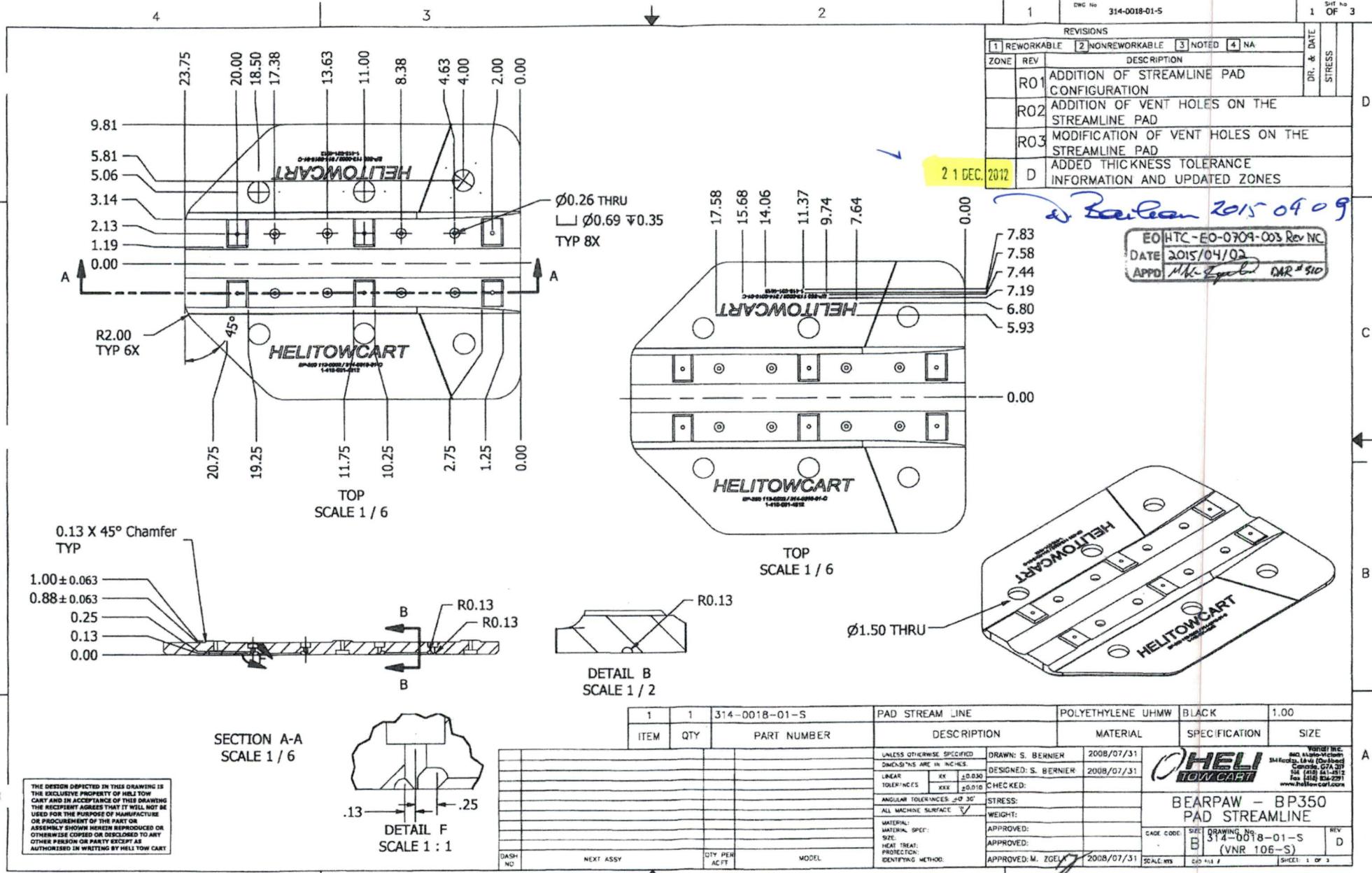
D. Badarau 2015 04 09

NOTE: ICEBLADE ASSEMBLY, ITEM4, CAN BE OMITTED FROM INSTALLATION (OPTIONAL)

ITEM	QTY	PART NUMBER	DESCRIPTION	MATERIAL	SPECIFICATION	SIZE
1	3	314-0019-15	U SHAPED CLIP	STEEL		
2	6	314-0012-01	FILLER BLOCK	STEEL		1/4
3	6	314-0007-15	SLOTTED CLIP SUPPORT	STEEL		
4	4	314-0005-15	ICE BLADE ASSEMBLY	STEEL		1X6 1/4
5	14	262-0001-17	MD20365-42B	STEEL		1/4-28
6	6	261-0001-17	AN4-14A	STEEL		1/4-28 UNF
7	20	263-0001-17	AN960-416	STEEL		1/4
8	1	314-0018-01-S	PAD STREAM LINE	POLYETHYLENE UHMW	BLACK	1
9	1	314-0021-01	SHRINK			

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DASH NO	NEXT ASSY	QTY PER ACFT	MODEL

DRAWING NO. B 112-0002-00-S D
SCALE: 1:1 CAD FILE # 112-0002-00.dwg SHEET: 1 OF 1



4

3

2

DWG NO 314-0018-01

SHT NO
OF

REVISION

1 REWORKABLE	2 NONREWORKABLE	3 NOTED	4 NA	
ZONE	REV	DESCRIPTION		
	R01	ADDITION OF STREAMLINE PAD CONFIGURATION		
	R02	ADDITION OF VENT HOLES ON THE STREAMLINE PAD		
	R03	MODIFICATION OF VENT HOLES ON THE STREAMLINE PAD		
	D	ADDED THICKNESS TOLERANCE INFORMATION AND UPDATED ZONES		

D

This technical drawing shows a top-down view of a rectangular metal component. The component has a central vertical slot with two horizontal slots extending from its bottom. There are four circular holes along the top edge and four circular holes along the bottom edge. A central vertical line is labeled 'D' at both ends. Two horizontal dashed lines are labeled 'E' at both ends. A dimension of 4.00 ± 0.063 is given for the width of the central slot. A dimension of 4.56 ± 0.03 is given for the total width of the component. A dimension of 0.132 is given for the thickness of the component. A dimension of 0.50 ± 0.063 is given for the height of the central slot. A dimension of $R0.75$ is given for the radius of the bottom-left corner. A dimension of $\phi 0.26$ is given for the diameter of the small circular holes. A dimension of $\phi 0.93 \pm 0.03$ is given for the diameter of the larger circular holes. A dimension of $\phi 1.50$ is given for the diameter of the holes at the top and bottom edges. A note 'TYP 6X' indicates there are six such holes. A note 'TYP' indicates the radius applies to one corner. A note 'BOTTOM SCALE 1 / 6' indicates the drawing is scaled down by a factor of 6.

C

A technical drawing showing a vertical slot with a top chamfer of $0.13 \times 45^\circ$ and a bottom radius of R1.58. The width of the slot is indicated as (.348) at the top and (.273) at the bottom.

B

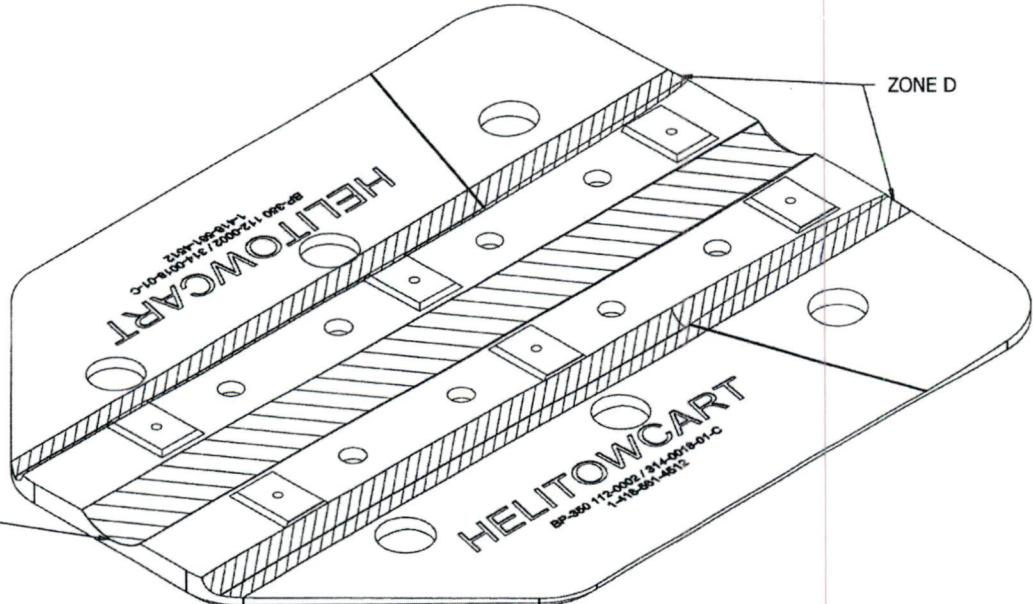
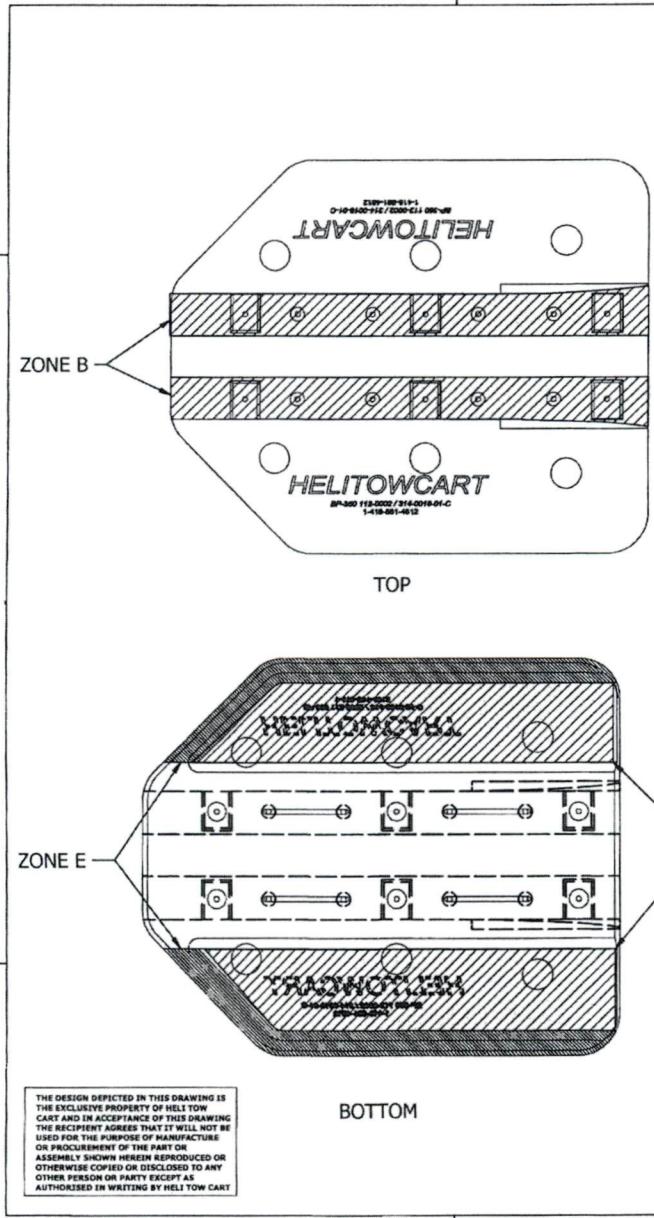
SECTION D-D
SCALE 1 / 6

.25±.09 X 45° Chamfer

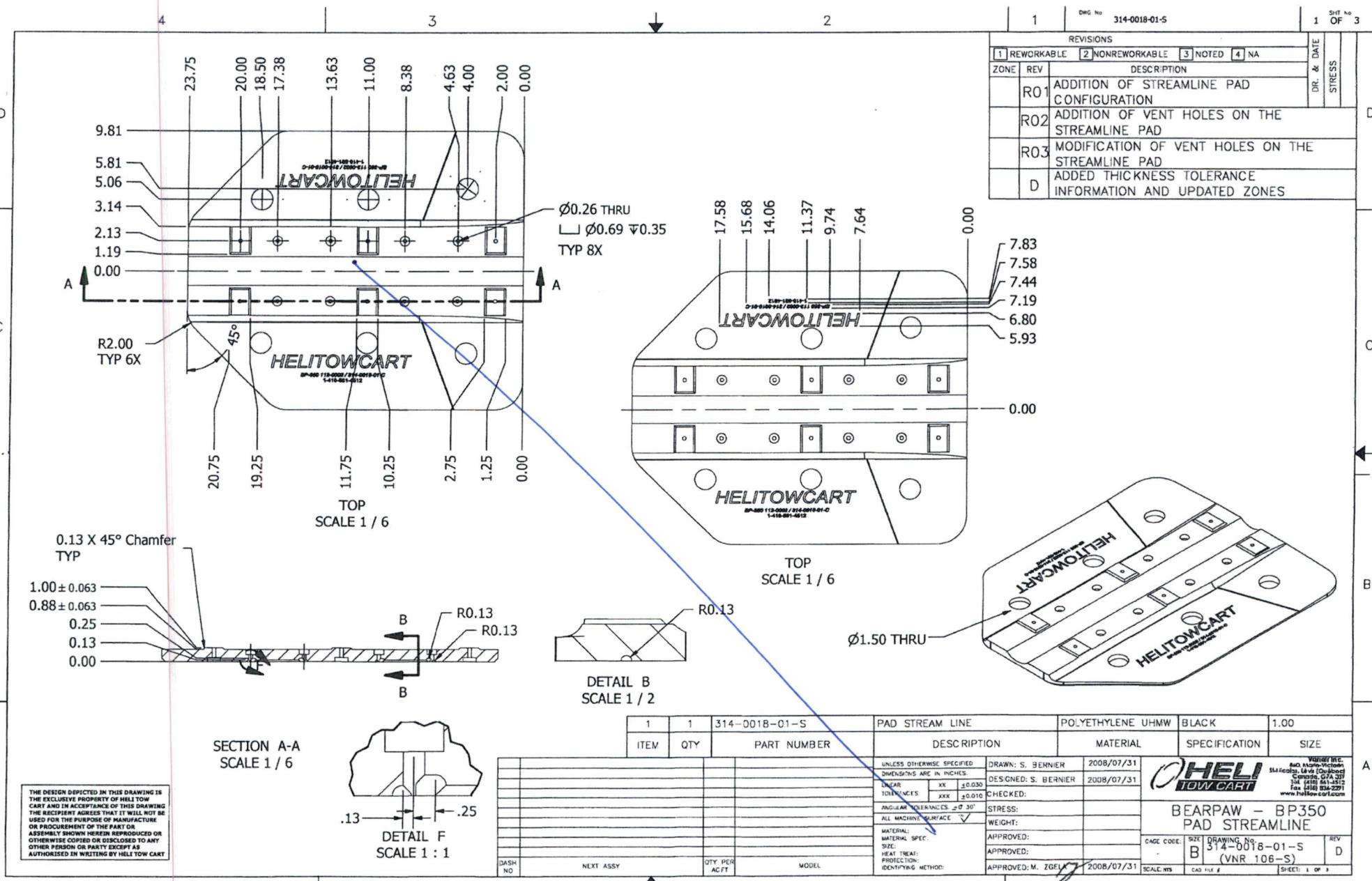
.50 X 14° Chamfer

A THE DESIGN DEPICTED IN THIS DRAWING IS
THE EXCLUSIVE PROPERTY OF HELI TOW
CARTRIDGE LTD. ACCORDINGLY, THE DRAWING
THE RECIPIENT AGREES THAT IT WILL NOT BE
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OR PROCUREMENT OF THE PART OR
ASSEMBLY SHOWN HEREIN REPRODUCED OR
OTHERWISE COPIED OR DISCLOSED TO ANY
OTHER PERSON OR PARTY EXCEPT AS
AUTHORISED IN WRITING BY HELI TOW CARTRIDGE

				UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	DRAWN: S. BERNIER	2008/07/31	 <p>OHELI TOW CART</p> <p>Vendor Inc. 800 Main Street St. Jacobs, 1E-0153 Concord, GTA J3P Ontario, Canada N0B 1L0 Tel: (905) 668-2291 Fax: (905) 668-2291 www.OHE利TowCart.com</p>	
				LINEAR TOLERANCES	XX \$0.030	DESIGNED: S. BERNIER		2008/07/31
				XXX	\$0.010	CHECKED:		
				ANGULAR TOLERANCE IS $\pm 10^\circ$	STRESS:			
				ALL MACHINED SURFACE ✓	WEIGHT:			
				MATERIAL:	APPROVED:			
				MATERIAL SPEC:				
				SIZE:				
				LEAT TREAT:	APPROVED:			
				PP-DETECTION:				
				IDENTIFYING METHOD:				
DASH NO	NEXT ASSY	QTY PER ACT FT	MODEL		APPROVED: M. ZGELA	2008/07/31		
					SCALE: 1:10	FILE #	SHEET: 2 of 3	



			UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	DRAWN: S. BERNIER	2008/07/31		Venier Inc. 800-463-1100 5410 Royal St., Laval (Qubec) Canada H7T 3T1 Toll Free 1-800-363-1100 Fax: 450 624-2291 www.venier.com		
			LINEAR TOLERANCES	DESIGNED: S. BERNIER	2008/07/31				
			XII ± 0.030						
			XXX ± 0.010	CHECKED:					
			ANGULAR TOLERANCES: $\pm 30'$	STRESS:		BEARPAW - BP350 PAD STREAMLINE			
			ALL MACHINE SURFACE ✓	WEIGHT:					
			MATERIAL:	APPROVED:		CASE CODE: SHEET 1 DRAWING NO.: 0018-01-S (VNR 106-S)	REV D		
			MATERIAL SPEC:	APPROVED:					
			TEMPERATURE:	APPROVED:					
			HEAT TREAT:	APPROVED:					
			PROTECTION:	APPROVED:					
DASH NO	NEXT ASSY	QTY PER ACT	MODEL	IDENTIFYING METHOD	APPROVED: M. ZGELA	2008/07/31	SCALE: NTS	PILOT FILE #	SHEET: 3 of 3



Z. Baetens 2013 02 09

↑
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date
2012 12 21

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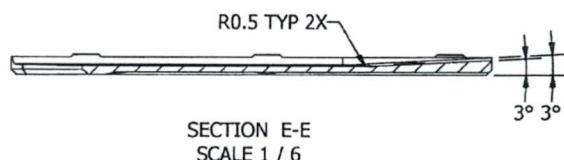
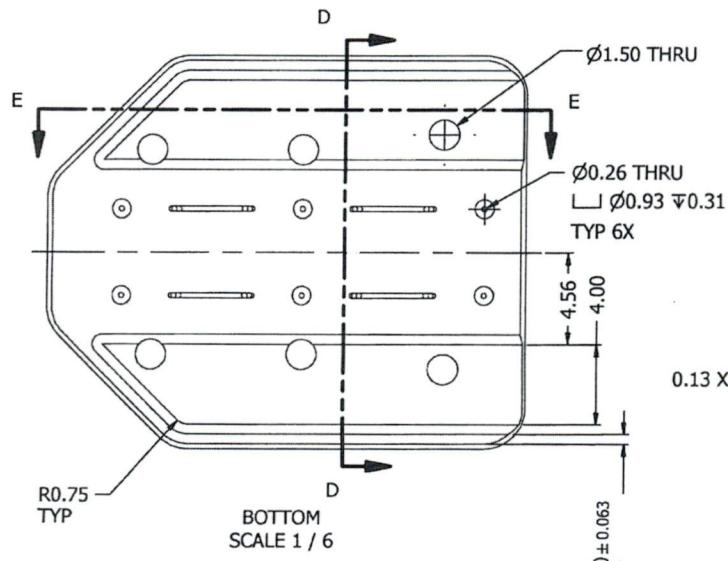
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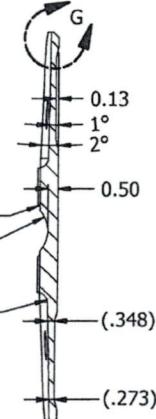
C

B

1



SECTION D-D
SCALE 1 / 6



Technical drawing showing a stepped corner. The top edge has a dimension of $.25 \pm .09$ and a note "X 45° Chamfer". The bottom edge has a dimension of $.50$ and a note "X 14° Chamfer".

DETAIL G

SCALE 1 : 1

THE DESIGN DEPICTED IN THIS DRAWING IS THE EXCLUSIVE PROPERTY OF HELI TOW CART AND IN ACCEPTANCE OF THIS DRAWING THE RECIPIENT AGREES THAT IT WILL NOT BE USED FOR THE PURPOSE OF MANUFACTURE OR PROCUREMENT OF THE PART OR ASSEMBLY SHOWN HEREIN REPRODUCED OR OTHERWISE COPIED OR DISCLOSED TO ANY OTHER PERSON OR PARTY EXCEPT AS AUTHORISED IN WRITING BY HELI TOW CART

				UNLESS OTHERWISE SPECIFIED		DRAWN: S. BERNIER	2008/07/31	 <p>O'HELI TOW CART</p> <p>Vans Inc. 840 Kestrel, Unit 6-10 (Oshawa) Ontario, N1J 3L7 tel 905 670 2211 fax 416 634 2211 www.ohelitowcart.com</p>
		DIMENSIONS ARE IN INCHES		DESIGNED: S. BERNIER	2008/07/31			
		LINAR	XX	±0.030	CHECKED:			
		TOLERANCES	XXX	±0.010				
		ANGULAR TOLERANCES: ± 30°		STRESS:				
		ALL MACHINE SURFACE ✓		WEIGHT:				
		MATERIAL:	APPROVED:					
		MATERIAL SPEC:	APPROVED:					
		SIZE:	APPROVED:					
		COAT TREAT:	APPROVED:					
		PROTECTION:	APPROVED:					
		IDENTIFYING METH-OD:	APPROVED: M. ZGELA		2008/07/31			
DASH NO.	NEXT ASSY	GTY PER ACT IT	MODEL	SCALE APTS	CDR FILE #	SHEET: 2 OF 3		

4

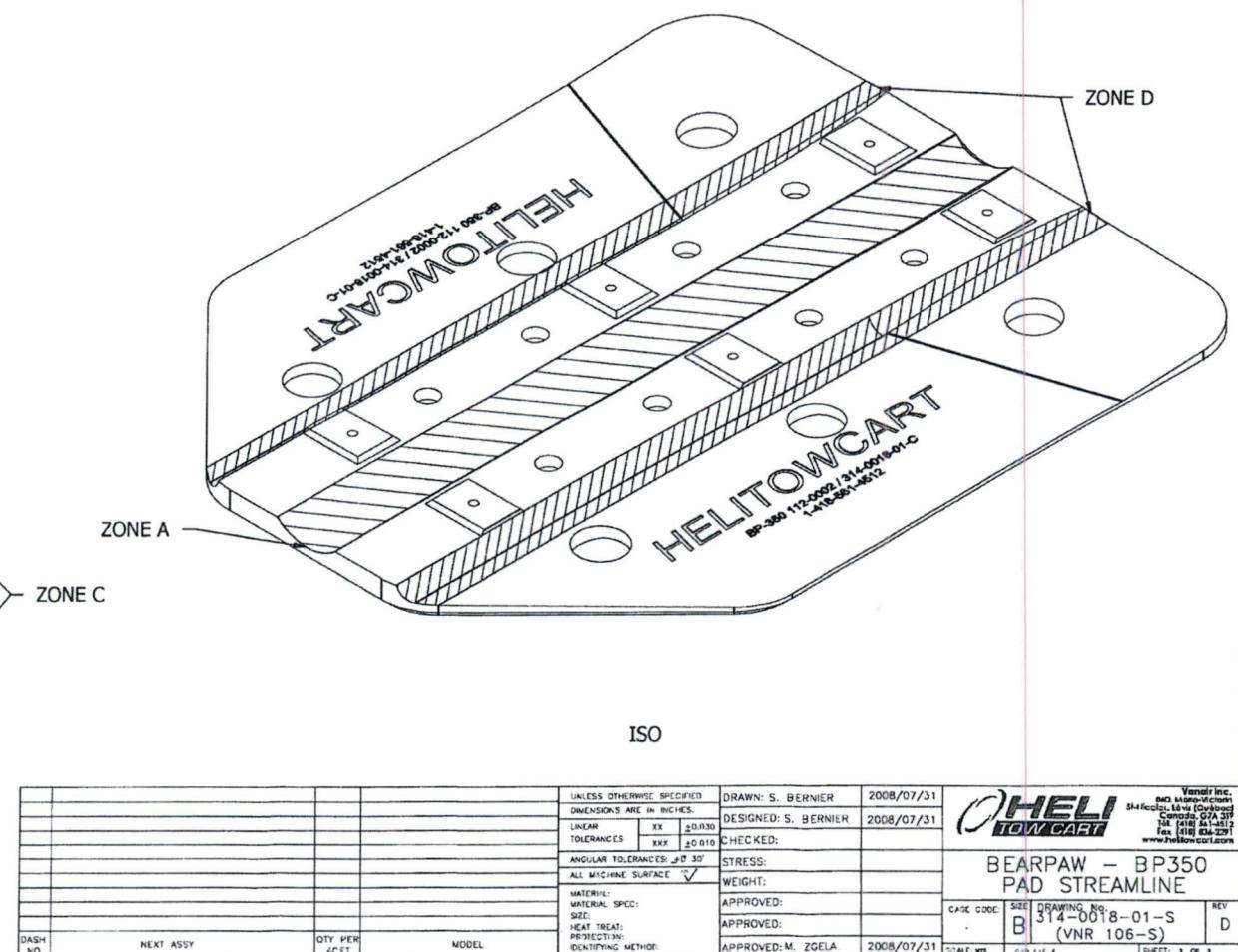
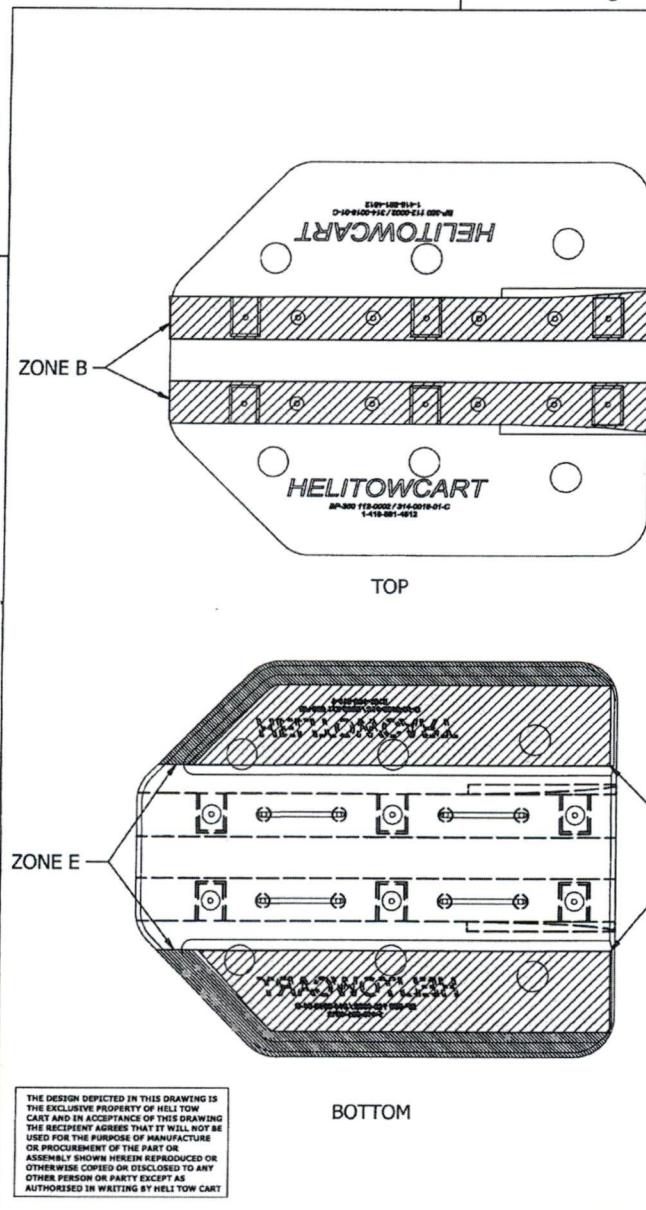
3

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DWG NO 314-0018-01-S

3 Shf No 3



4

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4 3 2 1

1 OF 1

REVISIONS			
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
ZONE	REV	DESCRIPTION	
	A	ADDITION OF STREAMLINE PAD CONFIGURATION	
	B	ADDITION OF VENT HOLES ON THE STREAMLINE PAD	
	C	MODIFICATION OF VENT HOLES ON THE STREAMLINE PAD	
	D	DELETED REVISIONS IDENTIFICATION IN PART NUMBER	

*manguel date de rev.D
2012 12 21*

ITEM	QTY	PART NUMBER	DESCRIPTION	MATERIAL	SPECIFICATION	SIZE
1	3	314-0019-15	FILLER BLOCK	STEEL		1/4
2	6	314-0012-01	SLOTTED CLIP SUPPORT	STEEL		
3	6	314-0007-15	ICE BLADE ASSEMBLY	STEEL		1X6 1/4
4	4	314-0005-15	MD20365-42B	STEEL		1/4-28
5	14	262-0001-17	AN4-14A	STEEL		1/4-28 UNF
6	6	261-0001-17	AN960-416	STEEL		1/4
7	20	263-0001-17	PAD STREAM LINE	POLYETHYLENE UHMW	BLACK	1
8	1	314-0018-01-S	SHRINK			
9	1	314-0021-01				

DASH NO	NEXT ASSY	QTY PER ACT	MODEL

Vendrinc
 840, Avenue Victoria
 Ste Kedron, Québec G1A 3R9
 Tél: 418 614-4512
 Fax: 418 614-4513
 www.helitowcart.com

OHELI
TOW CART

BEARPAW - BP350
 ASSEMBLY STREAMLINE

DRAWING No. B 112-0002-00-S D
 SCALE: 1:15 CAD FILE # 112-0002-00-Ldw SHEET: 1 OF 1

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 BY HELI TOW CART

4 3 2 1

112-0002-00-S-D

S. Bauder
 2008.07.31

Nathalie Barbeau

From: Claude Boule [CBoule@canadianhelicopters.com]
Sent: April-10-15 9:44 AM
To: Nathalie Barbeau
Cc: info@helitowcart.com
Subject: Re: BP350 _ Engineering Order to modify the pads

On vérifie

merci

Claude Boule
Aircraft Standards Manager Superviseur des Standards en Aéronef

Canadian Helicopters Limited
Office 450-452-3000
Direct 450-452-3025
Mobile 514-229-6190
Facsimile 450-452-2483
canadianhelicopters.com

From: "Nathalie Barbeau" <nbarbeau@helitowcart.com>
To: "Claude Boule" <CBoule@canadianhelicopters.com>
Cc: <info@helitowcart.com>
Date: 07/04/2015 11:08 AM
Subject: BP350 _ Engineering Order to modify the pads

Bonjour m. Boulé,

Nous avons enfin reçu le EO pour autoriser la modification des pads.

L'ingénieur a pris le temps de trouver une méthode efficace pour le faire. Il en fait la suggestion dans l'instruction.

Voici donc ci-joint les documents attendus par votre équipe!

Bien à vous,

Nathalie Barbeau
VP Commercial Affairs

Helitowcart (Vanair inc.)

877a Alphonse-Desrochers
St-Nicolas, Levis, Qc
Canada, G7A 5K6

T: +1.418.561.4512

F: +1.418.836.4575

nbarbeau@helitowcart.com

info@helitowcart.com

www.helitowcart.com[attachment "HTC-EO-0709-003 Rev NC (Repair of BearPaw BP350 for Installation with Dart Wear Pads).pdf"]

[deleted by Claude Boule/Canadian Helicopters] [attachment "314-0018-01-S Rev D (BP350 Streamline) EO 1.pdf" deleted by Claude Boule/Canadian Helicopters]

Nathalie Barbeau

From: Renaud Berthelot-Richer [renaub@ats-ast.com]
Sent: April-07-15 12:05 PM
To: Nathalie Barbeau
Cc: Jean-Francois Lemire
Subject: RE: EO BearPaw AS350 - V2
Attachments: 112-0002-00-S Rev D (BP350 Streamline Assembly) Date.pdf; 314-0018-01-S Rev D (BP350 Streamline) EO 1 and Date.pdf

Categories: Cat 1 - Needs important Action

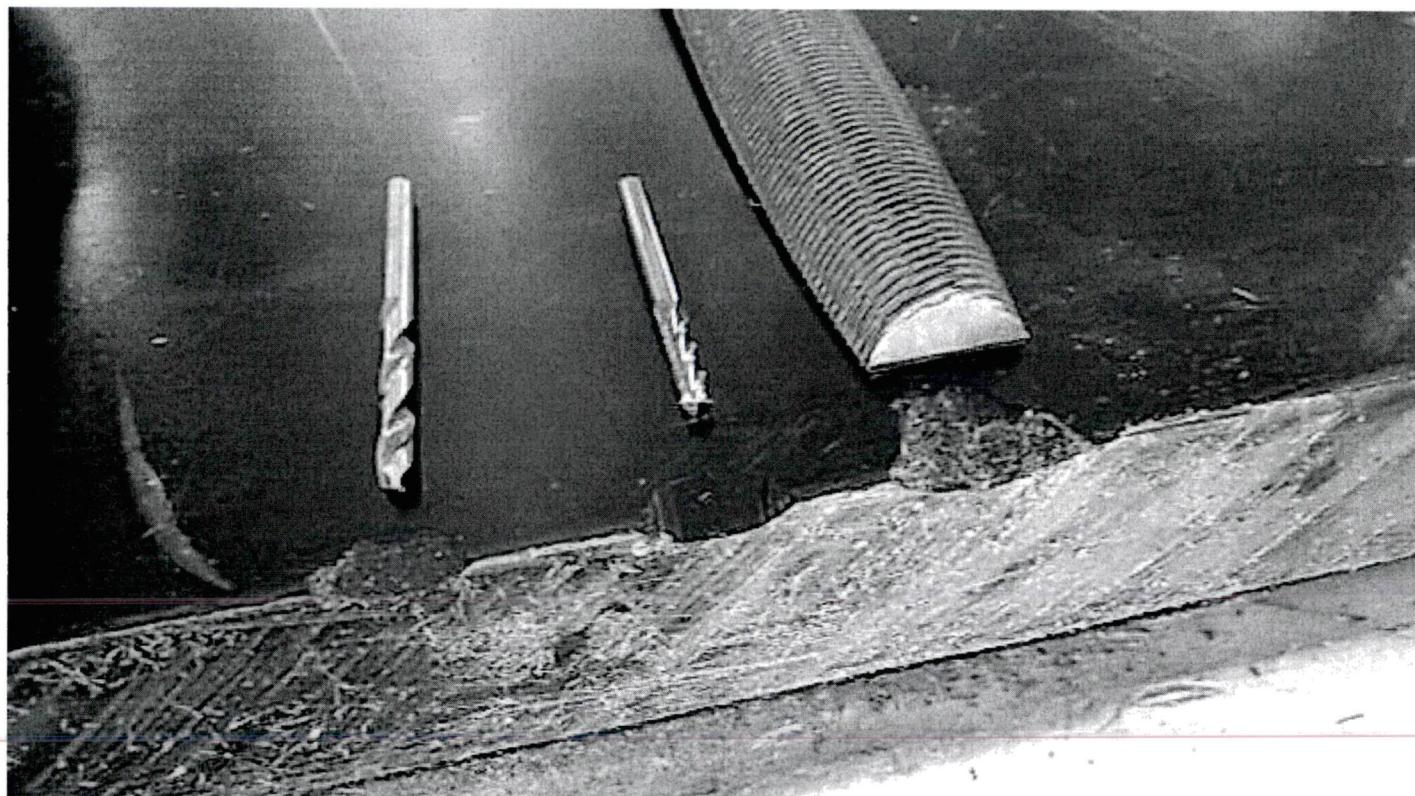
Bonjour Nathalie,

→ Finalement, en ajoutant une étape je n'avais pas besoin de refaire signer alors j'ai pu ajouter la date (voir pièces jointes). J'ai aussi ajouté la date sur le dessin d'assemblage. Les dates des autres dessins correspondent à la MDL.

→ Je vais te retourner le pad. A noter, après avoir trouvé la technique de réparation recommandée dans le EO, nous avons fait d'autres tests sur le pad. La réparation finale sera donc plus esthétique que celle que tu pourras observer sur le pad et devrait ressembler à la réparation au centre de la figure ci-dessous.
Renaud

En espérant le tout à ton entière satisfaction!

Renaud



De : Nathalie Barbeau [mailto:nbarbeau@helitowcart.com]

Envoyé : 7 avril 2015 11:05

À : Renaud Berthelot-Richer

Objet : RE: EO BearPaw AS350 - V2

Renaud,

Merci,

Svp me retourner le pad sur lequel vous avez fait les tests.

Nathalie Barbeau

VP Commercial Affairs

Helitowcart (Vanair inc.)

877a Alphonse-Desrochers

St-Nicolas, Levis, Qc

Canada, G7A 5K6

T: +1.418.561.4512

F: +1.418.836.4575

nbarbeau@helitowcart.com

info@helitowcart.com

www.helitowcart.com

From: Renaud Berthelot-Richer [mailto:renaudb@ats-ast.com]

Sent: April-07-15 10:16 AM

To: Nathalie Barbeau

Cc: Jean-Francois Lemire

Subject: EO BearPaw AS350 - V2

Bonjour Nathalie,

Voici en pièce jointe les documents corrigés. Pourrais-tu supprimer le courriel précédent pour éviter toute confusion?

Merci encore pour tes corrections,

Renaud



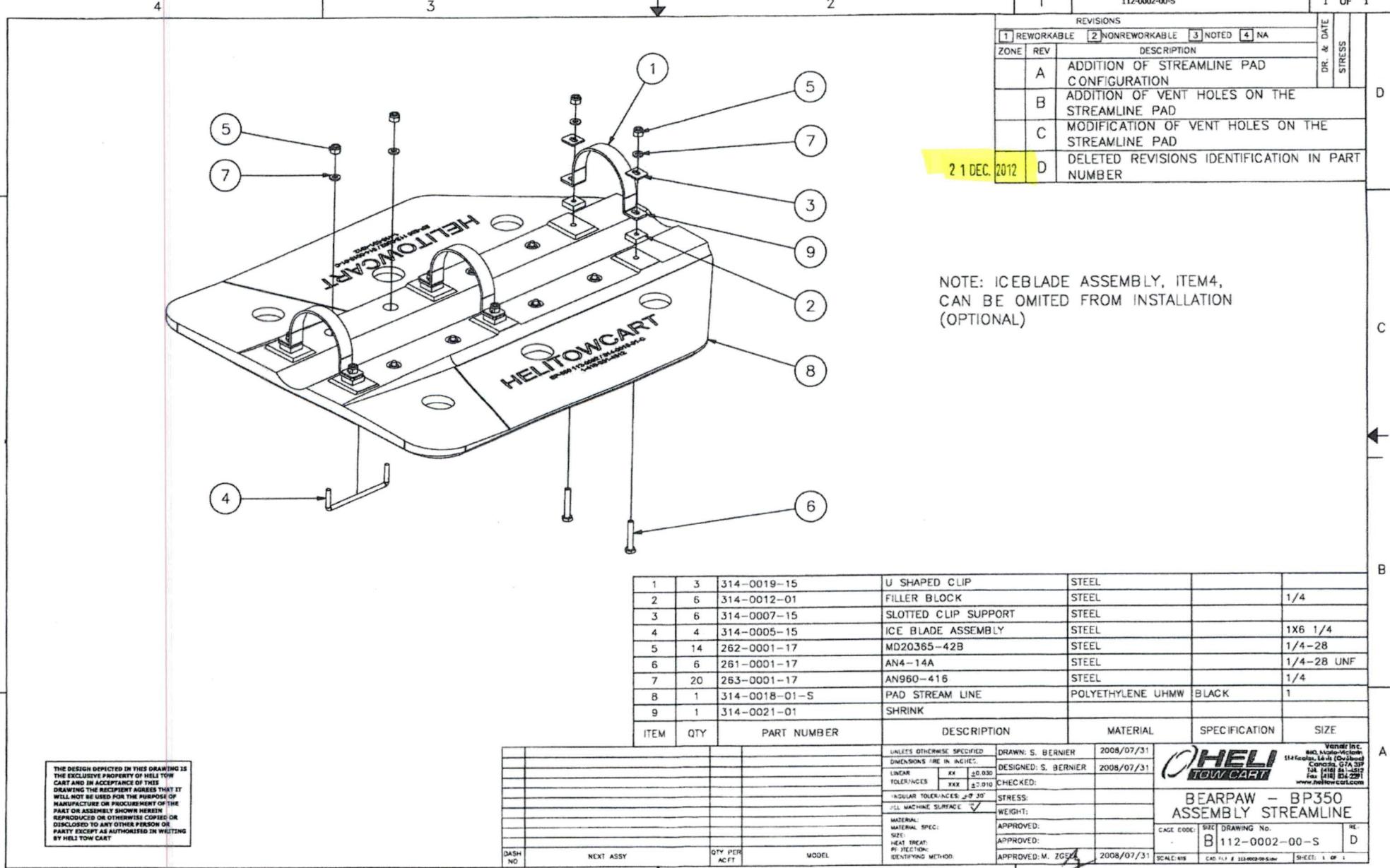
2595 St-Olivier
Trois-Rivières, Qc, Canada
G9A 4G1

www.ats-ast.com

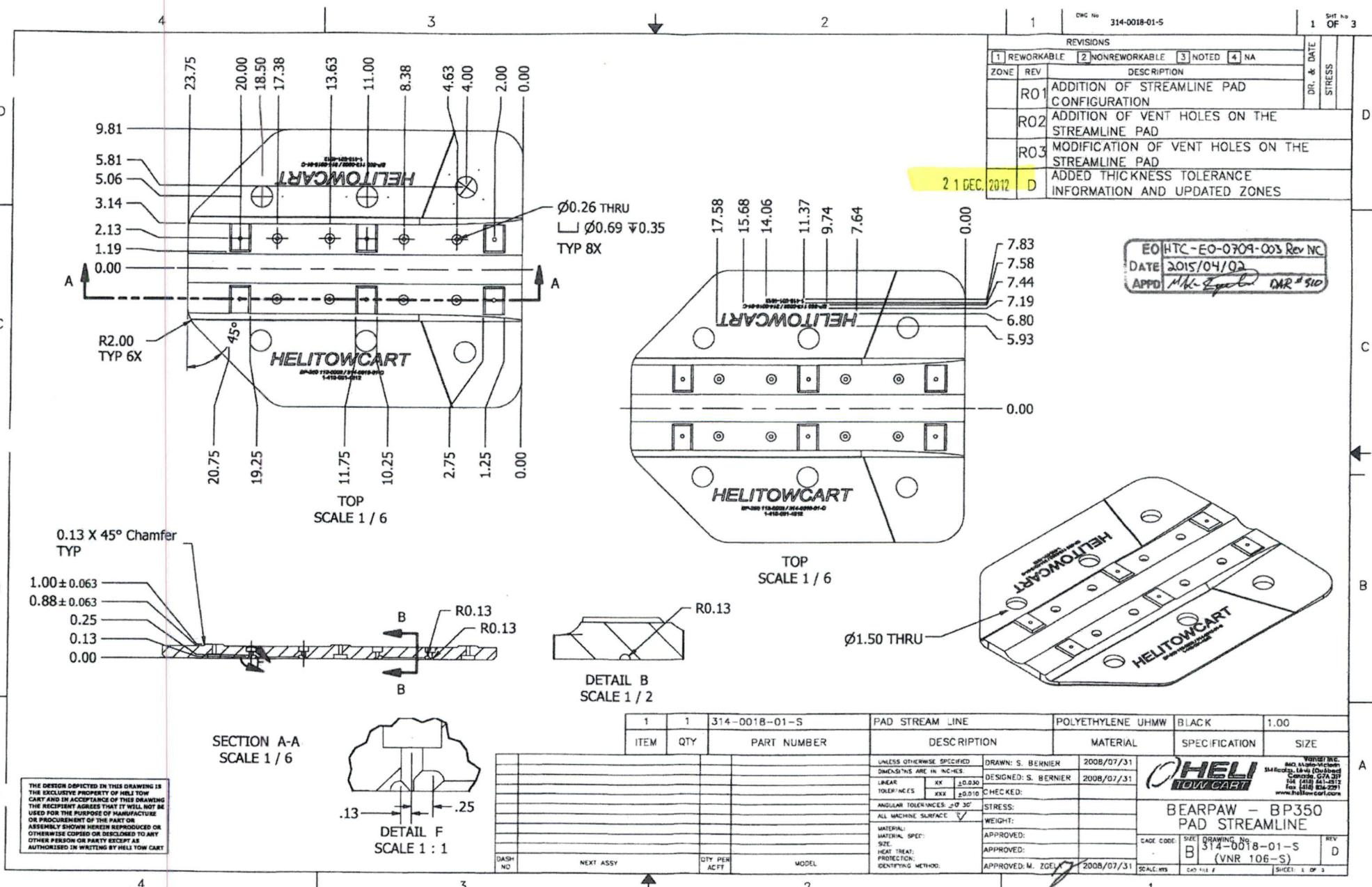
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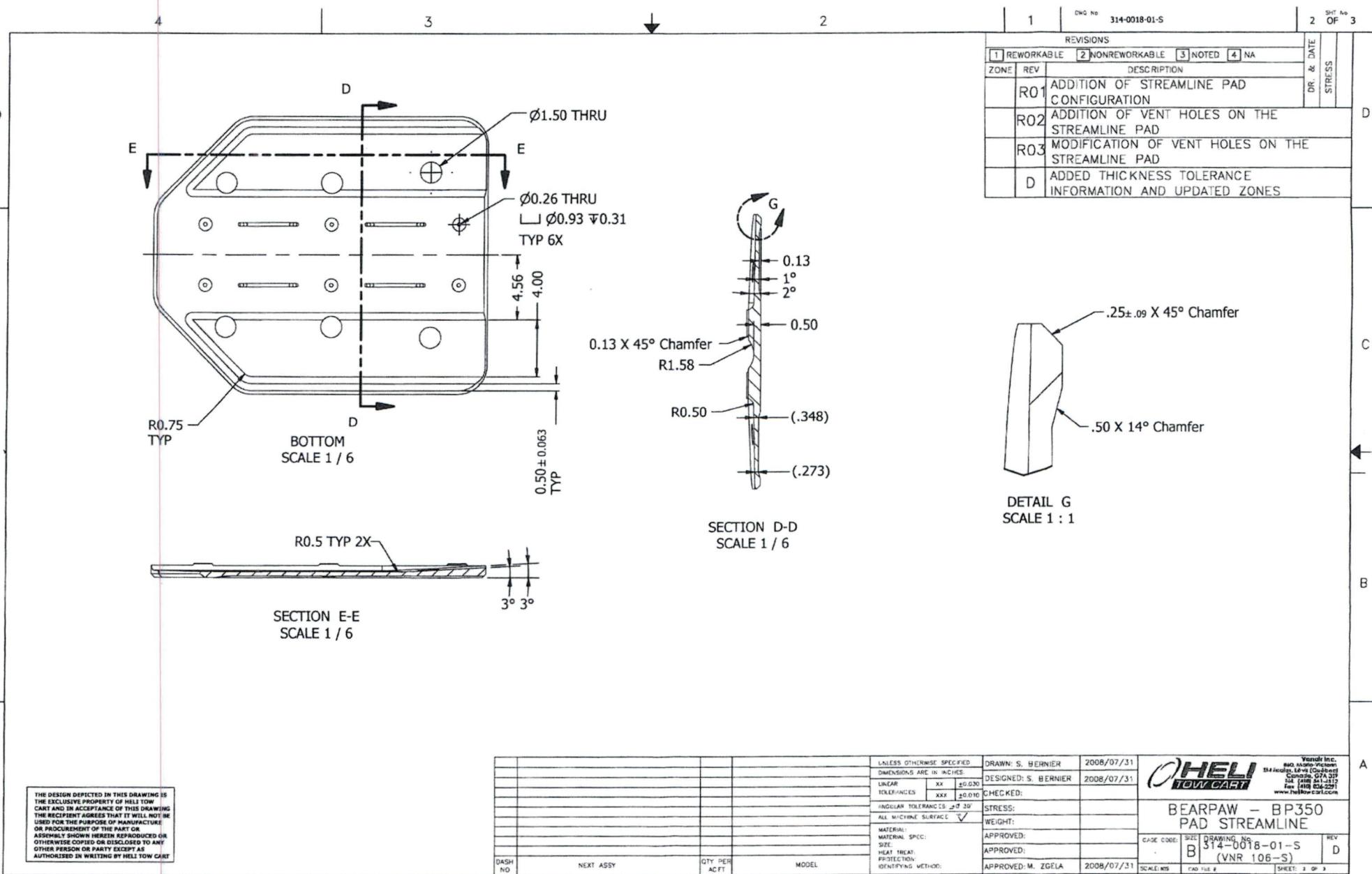
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BY HELI TOW CART**





<p style="text-align: center;">4</p> <p style="text-align: center;">TOP</p>	<p style="text-align: center;">3</p> <p style="text-align: center;">BOTTOM</p>	<p style="text-align: center;">2</p> <p style="text-align: center;">ISO</p>	<p style="text-align: center;">1</p> <p>Dwg No 314-0018-01-S</p> <p style="text-align: right;">Rev. 3 Sh. No. OF 3</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="4">REVISIONS</th> </tr> <tr> <th><input checked="" type="checkbox"/> REWORKABLE</th> <th><input type="checkbox"/> NONREWORKABLE</th> <th><input type="checkbox"/> NOTED</th> <th><input type="checkbox"/> NA</th> </tr> </thead> <tbody> <tr> <td>R01</td> <td colspan="3">ADDITION OF STREAMLINE PAD CONFIGURATION</td> </tr> <tr> <td>R02</td> <td colspan="3">ADDITION OF VENT HOLES ON THE STREAMLINE PAD</td> </tr> <tr> <td>R03</td> <td colspan="3">MODIFICATION OF VENT HOLES ON THE STREAMLINE PAD</td> </tr> <tr> <td>D</td> <td colspan="3">ADDED THICKNESS TOLERANCE INFORMATION AND UPDATED ZONES</td> </tr> </tbody> </table> <p style="text-align: right;">DR. & DATE STRESS</p> <p style="text-align: right;">D C B A</p>	REVISIONS				<input checked="" type="checkbox"/> REWORKABLE	<input type="checkbox"/> NONREWORKABLE	<input type="checkbox"/> NOTED	<input type="checkbox"/> NA	R01	ADDITION OF STREAMLINE PAD CONFIGURATION			R02	ADDITION OF VENT HOLES ON THE STREAMLINE PAD			R03	MODIFICATION OF VENT HOLES ON THE STREAMLINE PAD			D	ADDED THICKNESS TOLERANCE INFORMATION AND UPDATED ZONES		
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<p style="text-align: center;">4</p>	<p style="text-align: center;">3</p>	<p style="text-align: center;">2</p>	<p style="text-align: center;">1</p>

<p style="text-align: center;">DASH ND</p>	<p style="text-align: center;">NEXT ASSY</p>	<p style="text-align: center;">QTY PER ACT FT</p>	<p style="text-align: center;">MODEL</p>
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<p style="text-align: center;">UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES.</p>	<p style="text-align: center;">DRAWN: S. BERNIER 2008/07/31</p>				
<p style="text-align: center;">LINEAR TOLERANCES</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td>XX</td> <td>±0.030</td> </tr> <tr> <td>XXX</td> <td>±0.10</td> </tr> </table>	XX	±0.030	XXX	±0.10	<p style="text-align: center;">DESIGNED: S. BERNIER 2008/07/31</p> <p style="text-align: center;">CHECKED:</p>
XX	±0.030				
XXX	±0.10				
<p style="text-align: center;">ANGULAR TOLERANCES $\pm 0^{\circ} 30'$</p>	<p style="text-align: center;">STRESS:</p>				
<p style="text-align: center;">ALL MACHINE SURFACE ✓</p>	<p style="text-align: center;">WEIGHT:</p>				
<p style="text-align: center;">MATERIAL: MATERIAL SPEC: 925 STAINLESS STEEL TREAT: PROTECTION: IDENTIFYING METHOD:</p>	<p style="text-align: center;">APPROVED:</p>				
	<p style="text-align: center;">APPROVED:</p>				
	<p style="text-align: center;">APPROVED:</p>				
	<p style="text-align: center;">APPROVED: M. ZGELA 2008/07/31</p>				

<p>Vendor Inc. R&D Alpha-Victor St-Hubert, Quebec, Canada H3T 2J9 (450) 451-2512 (450) 451-2512 www.helitowcart.com</p>			
<p style="text-align: center;">CAGE CODE: B</p>	<p style="text-align: center;">DRAWING NO: 314-0018-01-S</p>	<p style="text-align: center;">REV: D</p>	<p style="text-align: center;">SCALE: NTS</p>
<p style="text-align: right;">Dwg file # SHEET: 1 OF 1</p>			

Nathalie Barbeau

From: Nathalie Barbeau [nbarbeau@helitowcart.com]
Sent: March-23-15 1:52 PM
To: 'Claude Boule'
Cc: 'info@helitowcart.com'
Subject: Follow UP: BearPaws from Helitowcart - skid wearshe bolt rubbing against pad
Attachments: Damages at 1st installation.JPG; IMG_0180.JPG; IMG_0187.JPG; IMG_0197.JPG

Good afternoon Mr Boulé,

I hope you are doing well. We have had a busy winter and since we came back from Heli-Expo we have had two completely crazy weeks.

Today, I can finally go back to addressing our long term projects.

I wonder: have you had any input from your team about the requested info yet?

I will be out of the country for the 3 first weeks of May so I would like if possible to address this before I leave.

I have already issued a PO with a deposit to our Engineering supplier to perform this EO but we have put all actions on hold until we have sufficient data to perform the work correctly.

We don't mind waiting for your team to provide us feedback with data when they have time, as we understand that they may also be very busy getting ready for the new season.

We would just like to know what are your team's plans vs providing us with the needed info to perform this EO. This would allow me to coordinate priorities with the Engineering consultants that do the EOs for us.

Warm Salutations to you and your team!

May you have a sunny Spring!

Nathalie Barbeau
VP Commercial Affairs

Helitowcart (Vanair inc.)
877a Alphonse-Desrochers
St-Nicolas, Levis, Qc
Canada, G7A 5K6
T: +1.418.561.4512
F: +1.418.836.4575
nbarbeau@helitowcart.com
info@helitowcart.com
www.helitowcart.com

From: Nathalie Barbeau [mailto:nbarbeau@helitowcart.com]

Sent: February-06-15 3:49 PM

To: 'Claude Boule'

Cc: 'Renaud Berthelot-Richer'

Subject: BearPaws from Helitowcart - skid wearshe bolt rubbing against pad

Good afternoon Mr Boulé,

Thank you for the attached pictures. This was very helpful to us.

As discussed a few minutes ago, in order to solve the issue identified by your team member, we consulted the engineering firm that manages all our STCd products.

They suggest to issue an Engineering Order to allow Mechanics to grind the bearpaw pad edge where the skid wearshoe bolts rub against them as this is the thickest zone and we have sufficient margin in this zone.

Before they go ahead to do an efficient Engineering Order; they asked me if we could request from your mechanics as much info and feedback as possible.

I thus submit to your attention the two questions we wish to ask your team:

- 1) Which Skid & Wearshoe Models?: It is the first time we hear of such issues with our pads. We wish to find out on which brands and models it occurs? (If other models have this issue too, please send us pictures)
- 2) Adjustment Suggestions?: We wish to issue recommendations that are practical and hassle free for your mechanics. I always like to get the input from those in the field, would they have anything to suggest to make it as simple as possible for them to address?

As discussed, I understand that this is a hectic period for your team so we will gladly wait 14 days prior to triggering the Engineering Order creation to wait for your team's feedback,

Our Warm Salutations to you and your team,

Nathalie Barbeau
VP Commercial Affairs

Helitowcart (Vanair inc.)
877a Alphonse-Desrochers
St-Nicolas, Levis, Qc
Canada, G7A 5K6
T: +1.418.561.4512
F: +1.418.836.4575
nbarbeau@helitowcart.com
info@helitowcart.com
www.helitowcart.com

From: Claude Boule [mailto:CBoule@canadianhelicopters.com]

Sent: February-06-15 9:59 AM

To: Renaud Berthelot-Richer

Cc: Nathalie Barbeau

Subject: Re: BearPaws Helitowcart

Allo, voici quelques photos:

Damages are more evident with the Dart Skid tubes

Je n'est pas eu le temps de trouver un appareil avec des "vieux" dommages.

Claude Boule
Aircraft Standards Manager Superviseur des Standards en Aéronef

Canadian Helicopters Limited
Office 450-452-3000

Direct 450-452-3025
Mobile 514-229-6190
Facsimile 450-452-2483
canadianhelicopters.com



From: "Renaud Berthelot-Richer" <renaudb@ats-ast.com>
To: <CBoule@canadianhelicopters.com>
Cc: "Nathalie Barbeau" <nbarbeau@helitowcart.com>
Date: 02/02/2015 11:56 AM
Subject: BearPaws Helitowcart

Bonjour M. Boule,

Tel que discuté, j'aurais besoin de l'information suivante :

1. Photo montrant le bris ou dommage (ou l'absence de bris ou dommage) sur un bearpaw de plusieurs années;
2. Description du bris ou dommage observé par un opérateur;
3. Photo de côté montrant l'espace entre la tête de bolt et le bearpaw (une distance mesurée serait utile si possible);
4. Quels types de wear pads avez-vous d'installé (pleine longueur ou longueur partielle)?

Merci de nous avoir fait part de cette problématique.

Sincèrement,

Renaud



2595 St-Olivier
Trois-Rivières, QC, Canada
G9A 4G1

www.ats-ast.com

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Bon Commande

Supplier: Aviatech
Contact: Renaud Berthelot-Richer
Coordinates: 2595 Rue St-Olivier
 Trois-Rivières, Qc, G9A 4G1

P.O. No:	nb - 150206-01 (initials-yyymmdd-sequence)
Ship to:	Helitowcart Nathalie Barbeau 418 561 4512

renaudb@ats-ast.com
819-601-8049 ext 211

Instructions:

Total Qty			Description	Rev.	Due Date	Currency:
						Unit Price
			<u>Ref Votre soumission no X2015-07 Rev NC</u> <u>EO pour réparation de Bearpaws Pads Modèle BP350 (confit boulons de wearshoe Dart)</u>			
1			Dev'pt de méthode de réparation			\$270.00
1			Rassembler info technique auprès de Can Heli vs divers modèles de skids			\$142.00
1			Préparation du document d'ingénierie (Engineering Order)			\$570.00
			fait Nathalie a Envoyé un pad pour effectuer essais pour trouver solution de réparation			
			fait Nathalie a communiqué avec Claude Boulé pour obtenir info de ses mécaniciens			
			Délai d'attente des infos de Claude Boulé: 14 jours (rappel par NB le 23 fév)			
		***	<u>Entente avec Renaud d'attendre ces infos avant de procéder à ce PO.</u>			

*Depôt 50% = \$49
chèque 3116 / 302*

Posté 2015 02 06

Issued by: Nathalie Barbeau
Date: 2015 02 06

Subtotal	\$982.00
Total	
TPS	
TVQ	
Shipping	
Total	

Le 06 février 2015
Dossier: X2015-07 Rev NC

Go ahead with this one

Mme. Nathalie Barbeau
Helitowcart (Vanair inc.)
877a Alphonse-Desrochers
St-Nicolas, Lévis, QC
G7A 5K6

Sujet: Engineering Order (EO) pour la réparation des BearPaws modèle BP350

Mme. Barbeau,

Tel que demandé, nous avons préparé un estimé de coûts pour la préparation d'un document d'ingénierie (Engineering Order) permettant la réparation des BearPaws installés sur les hélicoptères AS350/355.

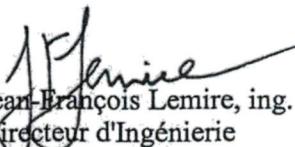
Description	Coût
a. Développement de la méthode de réparation (tests de limage sur BearPaw prototype)	270 \$
b. Rassembler l'information technique auprès de Canadian Helicopters Limited (types de wear pads qui sont problématiques, types de skids, etc.)	142 \$
c. Préparation du document d'ingénierie (Engineering Order)	570 \$
TOTAL:	982 \$

Horaire et Paiements

Le montant total de cette proposition est de 982 \$ et pourra être complétée dans un délai de 2 semaines sous réception d'un PO et d'un dépôt de 50%. Il est de la responsabilité d'Helitowcart d'assurer la collaboration de Canadian Helicopters Limited pour l'obtention des documents techniques demandés par Aviatech.

Pour toutes questions, n'hésitez pas à communiquer avec Renaud Berthelot-Richer qui s'occupera des aspects techniques du projet au 819-601-8049 #211 ou par courriel à renaudb@ats-ast.com.

Sincèrement,


 Jean-François Lemire, ing.
 Directeur d'Ingénierie
jeanfrancoisl@ats-ast.com
 Tél. 819-601-8049 #203



www.helitowcart.com
By Vanair inc.

Bon Commande

Supplier:	Aviatech	P.O. No:	nb - 150206-01 (initials-ymmd-sequence)
Contact:	Renaud Berthelot-Richer		
Coordinates:	2595 Rue St-Olivier Trois-Rivières, Qc, G9A 4G1	Ship to:	Helitowcart Nathalie Barbeau 418 561 4512
	renaub@ats-ast.com		

Instructions:

Total Qty		Description	Rev.	Due Date	Currency:
					Unit Price
					Amount
<u>Ref Votre soumission no X2015-07 Rev NC</u>					
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1		Rassembler info technique auprès de Can Heli vs divers modèles de skids			\$142.00
1		Préparation du document d'ingénierie (Engineering Order)			\$570.00
	fait	Nathalie a Envoyé un pad pour effectuer essais pour trouver solution de réparation			
	fait	Nathalie a communiqué avec Claude Boulé pour obtenir info de ses mécaniciens			
		Délai d'attente des infos de Claude Boulé: 14 jours (rappel par NB le 23 fév)			
	***	<u>Entente avec Renaud d'attendre ces infos avant de procéder à ce PO.</u>			

$$\text{Depot } 50\% = \$49$$

Check 3116 / 102

Posté 2015 02 04

Issued by: Nathalie Barbeau
Date: 2015 02 06

Subtotal \$982.00

Total

TPS

TVQ

Shipping

Total

Helitowcart (Vanair Inc.): 877A Alphonse-Desrochers, St-Nicolas, Qc, Canada, G7A 5K6
tel: 418-561-4512, Fax: 418-836-4575, info@helitowcart.com

Nathalie Barbeau

From: Renaud Berthelot-Richer [renaudb@ats-ast.com]
Sent: March-31-15 9:52 AM
To: Nathalie Barbeau
Cc: Jean-Francois Lemire
Subject: Estimé changement design
Attachments: X2015-10 Rev NC - Estimé Changement Design.pdf

Categories: Cat 1 - Needs important Action

Bonjour Nathalie,

Voici l'estimé en pièce jointe pour le changement au design. J'ai mis une note dans le projet pour qu'on ne l'oublie pas.

Renaud



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 Spéciale bouteille plastique: faire longer when they're not care down.
Avant d'empêcher, pensez à l'environnement.

Now: Triggered
2015 04 03

issue an EO that allows mechanics to carve out plastic in pod to fit the Dart wearshoe bolts.
[Does not involve TC]

EO will include suggested instruction & tools to perform the carving without the plastic melting. Renaud says he found a way that will do a good job

Eventually: Hold

Review design of pod to create an additional slot on top, full length to clear the possible DSRT Bolts.
Renaud suggest we do so when I am ready to flipper a new batch (in 18 months?) so that we can include other changes as well and pay only once for the process with TC.

± \$1700



Le 06 février 2015
Dossier: X2015-10 Rev NC

Mme. Nathalie Barbeau
Helitowcart (Vanair inc.)
877a Alphonse-Desrochers
St-Nicolas, Levis, QC
G7A 5K6

Sujet: Modification au concept du BearPaw pour l'installation sur les hélicoptères AS350/355 équipés de *wear pads*

Mme. Barbeau,

Tel que demandé, nous avons préparé un estimé de coûts pour la modification du concept de BearPaws pour les AS350/355 équipés de *wear pads*. Le présent estimé comprend les éléments suivants :

Description	Coût
a. Conception de la modification	430 \$
b. Mise à jour du dessin d'assemblage et du dessin du pad	520 \$
c. Préparation du document d'ingénierie (Technical Memorandum) pour justifier l'aspect structurel de la modification et mise à jour de la MDL (Master Drawing List)	760 \$
TOTAL:	1710 \$

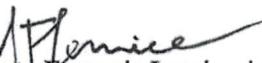
Prendre en note que l'estimé ne comprend pas la mise à jour des dessins de pièce, la mise à jour des instructions d'installation ainsi que des modifications à la quincaillerie nécessaire pour effectuer l'installation (boulons, rondelles, etc.).

Horaire et Paiements

La soumission est d'un montant de 1710 \$ et pourra être complétée dans un délai de 3 semaines sous réception d'un PO et d'un dépôt de 50%. La validité de la présente soumission est de 30 jours.

Pour toutes questions, n'hésitez pas à communiquer avec Renaud Berthelot-Richer au 819-601-8049 #211 ou par courriel à renaudb@ats-ast.com.

Sincèrement,


Jean-François Lemire, ing.
Directeur d'Ingénierie
jeanfrancoisl@ats-ast.com
Tél. 819-601-8049 #203

Le 06 février 2015
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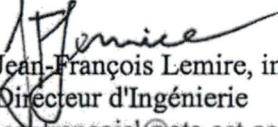
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Sincèrement,


Jean-François Lemire, ing.
Directeur d'Ingénierie
jeanfrancoisl@ats-ast.com
Tél. 819-601-8049 #203

Aviatech Services Techniques Inc.

2595, rue St-Olivier
Trois-Rivières, Québec, G9A 4G1
Tel: (819) 601-8049 Fax: (819) 377-7928
Courriel: info@ats-ast.com
Site Internet: www.ats-ast.com

HCD THIS ONE

- On a du stock pour 18 mois en main.
- Attende proch. prod. pour faire motif dessiner par des fois q- il y aurait besoin de modifier cette chose

je présente * Faire un slot pleine longueur pad
Nathalie Barbeau pour bedens DART

From: Renaud Berthelot-Richer [renaudb@ats-ast.com]
Sent: March-30-15 11:04 AM
To: Claude Boule
Cc: Nathalie Barbeau
Subject: Bearpaws Helitowcart et wear pads dart

Categories: Cat 1 - Needs important Action

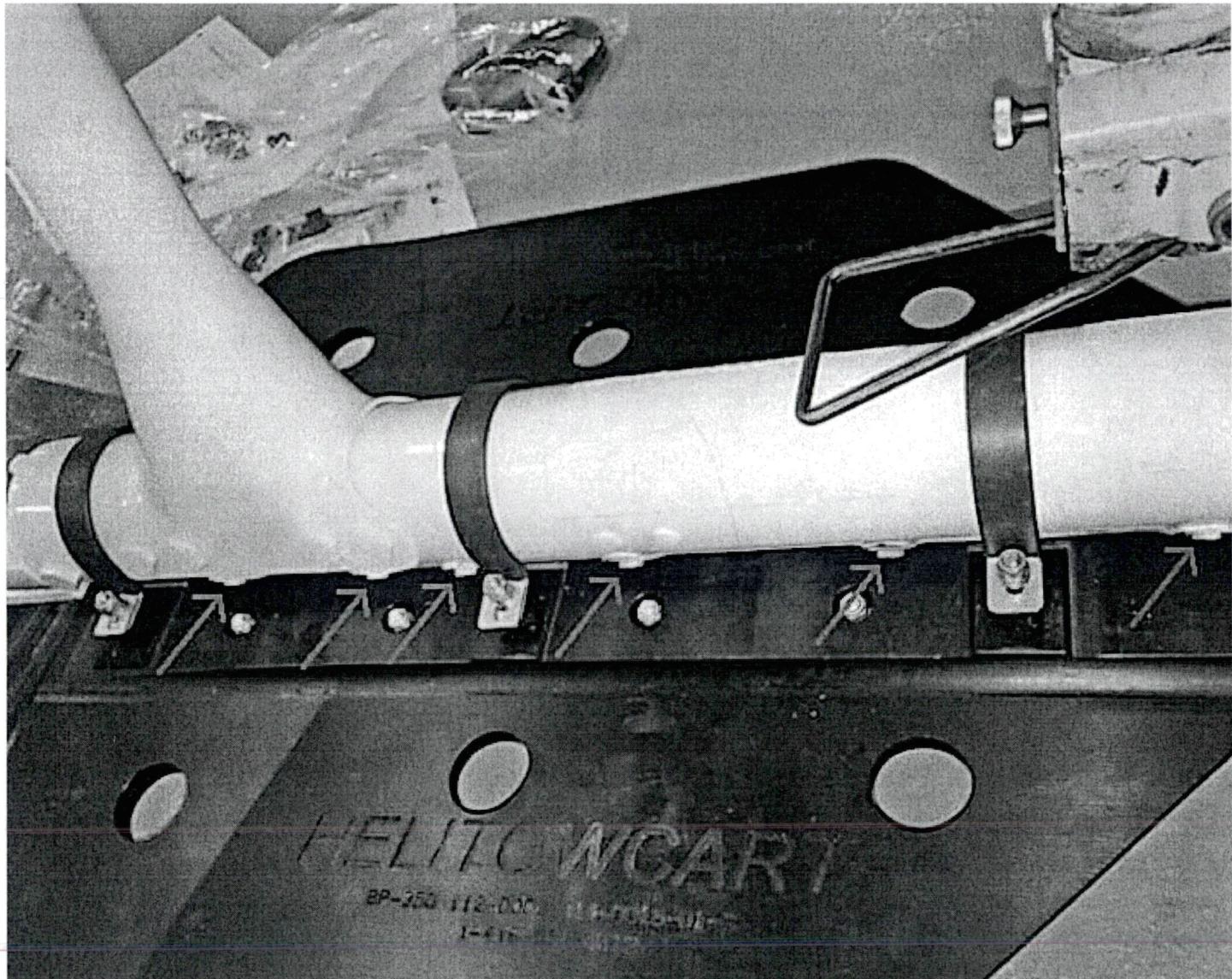
Bonjour M. Boule,

Est-ce que l'interférence se produit pour toutes les bolts des wear pads, tel qu'ilustré?

Sincèrement,

Renaud

ATT: IMPLICATÉ
Δ à TC
= \$\$\$
au moins
\$ 1700
à prévoir





2595 St-Olivier
Trois-Rivières, QC, Canada
G9A 4G1

www.ats-ast.com

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 Studios have limited press time because they're not one show.
 Avant d'imprimer, pensez à l'environnement.

Nathalie Barbeau

From: Nathalie Barbeau [nbarbeau@helitowcart.com]
Sent: February-06-15 3:49 PM
To: 'Claude Boule'
Cc: 'Renaud Berthelot-Richer'
Subject: BearPaws from Helitowcart - skid wearshe bolt rubbing against pad
Attachments: Damages at 1st installation.JPG; IMG_0180.JPG; IMG_0187.JPG; IMG_0197.JPG

Good afternoon Mr Boulé,
Thank you for the attached pictures. This was very helpful to us.

As discussed a few minutes ago, in order to solve the issue identified by your team member, we consulted the engineering firm that manages all our STCd products.
They suggest to issue an Engineering Order to allow Mechanics to grind the bearpaw pad edge where the skid wearshoe bolts rub against them as this is the thickest zone and we have sufficient margin in this zone.

Before they go ahead to do an efficient Engineering Order; they asked me if we could request from your mechanics as much info and feedback as possible.

I thus submit to your attention the two questions we wish to ask your team:

- 1) Which Skid & Wearshoe Models?: It is the first time we hear of such issues with our pads. We wish to find out on which brands and models it occurs? (If other models have this issue too, please send us pictures)
- 2) Adjustment Suggestions?: We wish to issue recommendations that are practical and hassle free for your mechanics. I always like to get the input from those in the field, would they have anything to suggest to make it as simple as possible for them to address?

As discussed, I understand that this is a hectic period for your team so we will gladly wait 14 days prior to triggering the Engineering Order creation to wait for your team's feedback,

Our Warm Salutations to you and your team,

Nathalie Barbeau
VP Commercial Affairs

Helitowcart (Vanair inc.)
877a Alphonse-Desrochers
St-Nicolas, Levis, Qc
Canada, G7A 5K6
T: +1.418.561.4512
F: +1.418.836.4575
nbarbeau@helitowcart.com
info@helitowcart.com
www.helitowcart.com

From: Claude Boule [mailto:CBoule@canadianhelicopters.com]
Sent: February-06-15 9:59 AM
To: Renaud Berthelot-Richer
Cc: Nathalie Barbeau
Subject: Re: BearPaws Helitowcart

Allo, voici quelques photos:

Damages are more evident with the Dart Skid tubes

Je n'est pas eu le temps de trouver un appareil avec des "vieux" dommages.

Claude Boule
Aircraft Standards Manager Superviseur des Standards en Aéronef

Canadian Helicopters Limited

Office 450-452-3000
Direct 450-452-3025
Mobile 514-229-6190
Facsimile 450-452-2483
canadianhelicopters.com



From: "Renaud Berthelot-Richer" <renaudb@ats-ast.com>
To: <CBoule@canadianhelicopters.com>
Cc: "Nathalie Barbeau" <nbarbeau@helitowcart.com>
Date: 02/02/2015 11:56 AM
Subject: BearPaws Helitowcart

Bonjour M. Boule,

Tel que discuté, j'aurais besoin de l'information suivante :

1. Photo montrant le bris ou dommage (ou l'absence de bris ou dommage) sur un bearpaw de plusieurs années;
2. Description du bris ou dommage observé par un opérateur;
3. Photo de côté montrant l'espace entre la tête de bolt et le bearpaw (une distance mesurée serait utile si possible);
4. Quels types de wear pads avez-vous d'installé (pleine longueur ou longueur partielle)?

Merci de nous avoir fait part de cette problématique.

Sincèrement,

Renaud

Renaud Berthelot-Richer, ing.

CONCEPTION STRUCTURE AÉRONAUTIQUE
AERONAUTICAL STRUCTURE DESIGN

T: 819.601.8049 #211

renaudb@ats-ast.com



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G9A 4G1

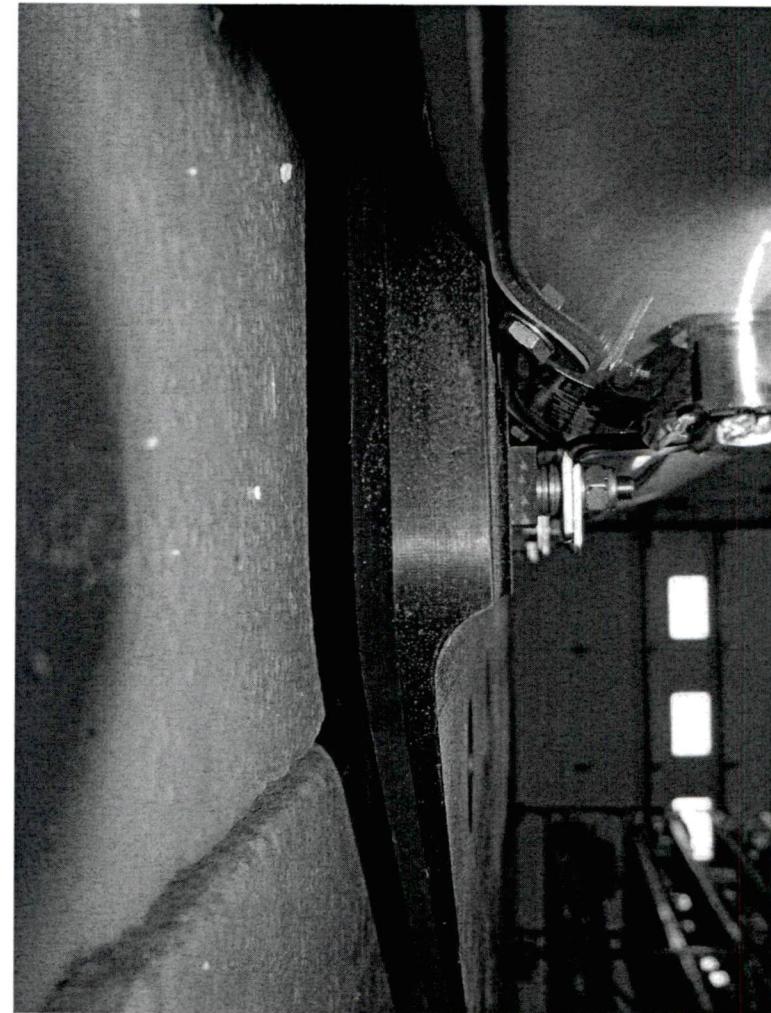
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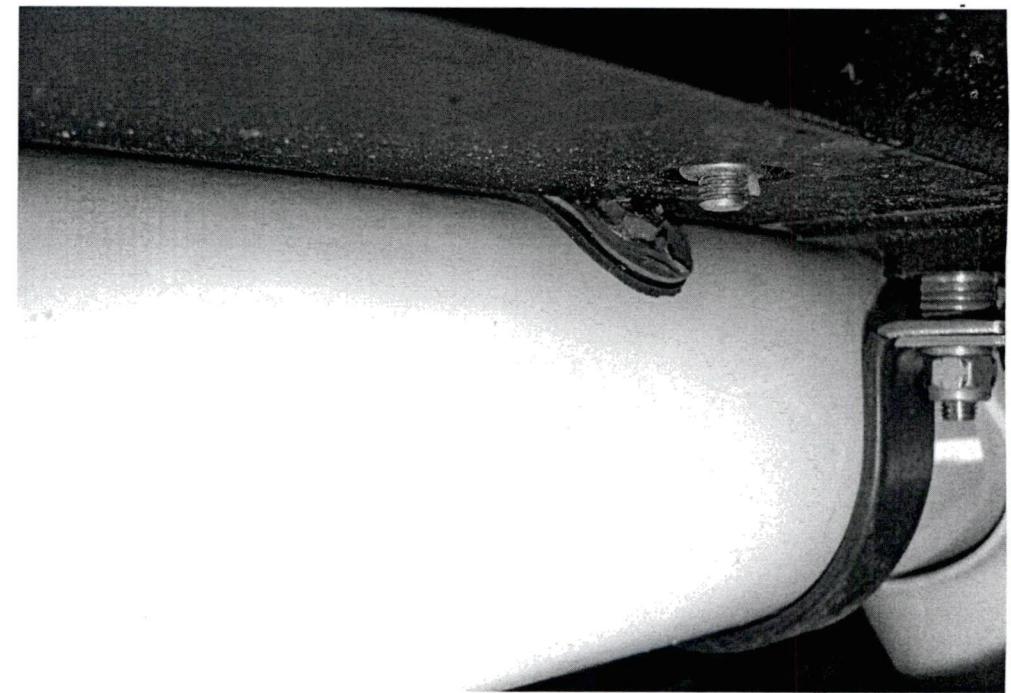
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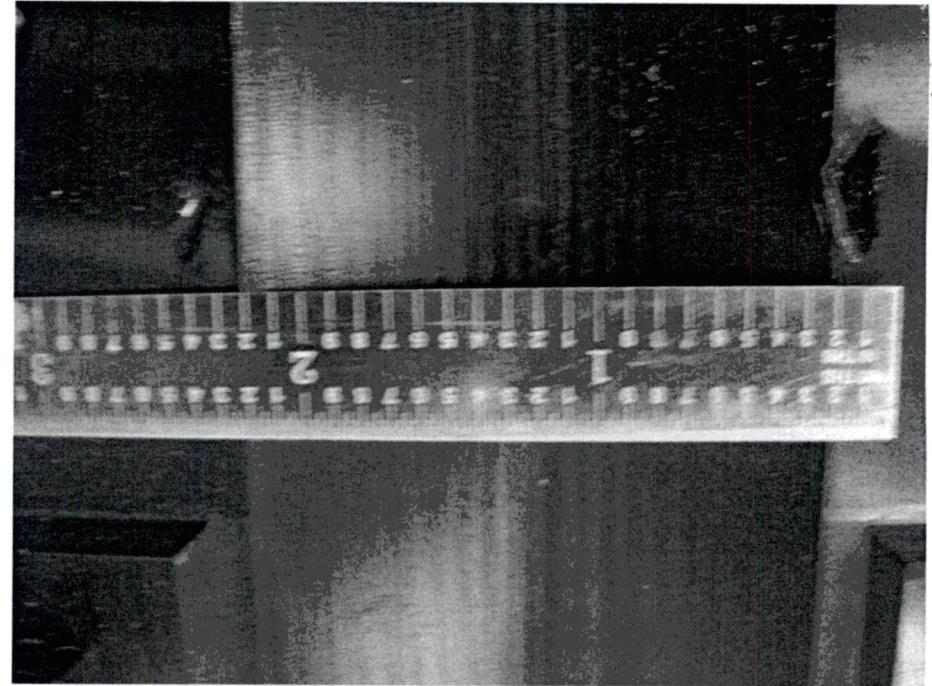
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 Standard paper products. Please recycle longer version. They're not just sheets.
Avant d'imprimer, pensez à l'environnement.









Nathalie Barbeau

From: Renaud Berthelot-Richer [renaudb@ats-ast.com]
Sent: February-02-15 11:56 AM
To: CBoule@canadianhelicopters.com
Cc: Nathalie Barbeau
Subject: BearPaws Helitowcart

Categories: Cat 1 - Needs important Action

Bonjour M. Boule,

Tel que discuté, j'aurais besoin de l'information suivante :

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Merci de nous avoir fait part de cette problématique.

Sincèrement,

Renaud

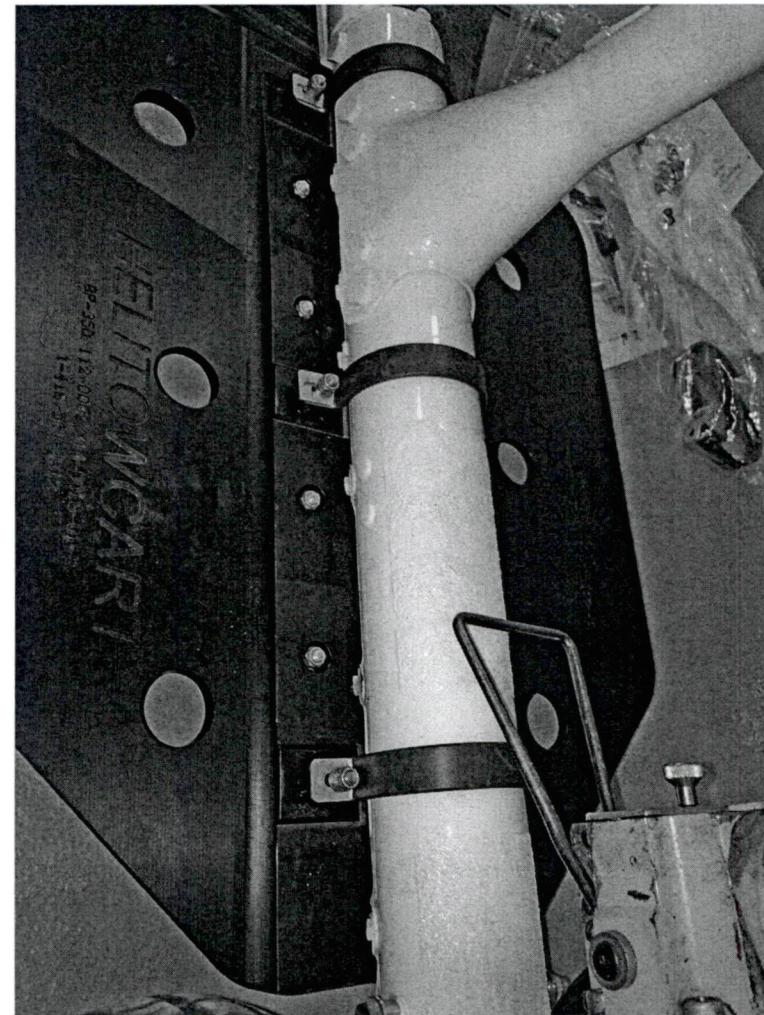


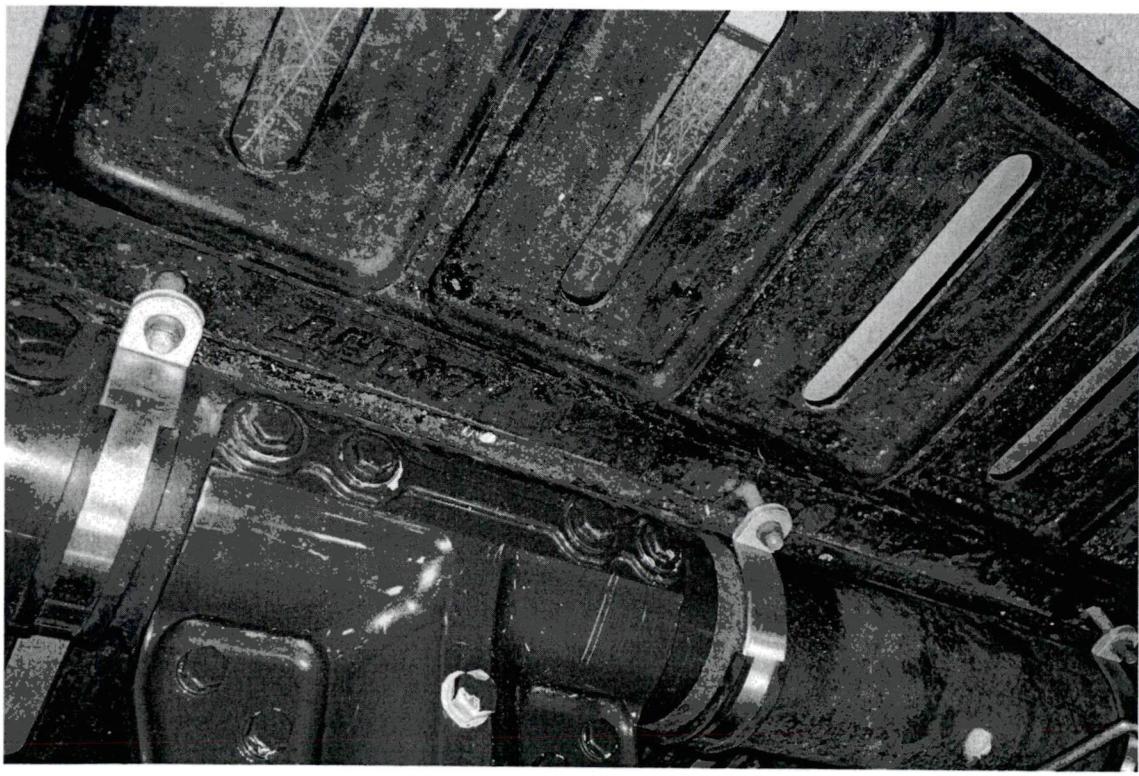
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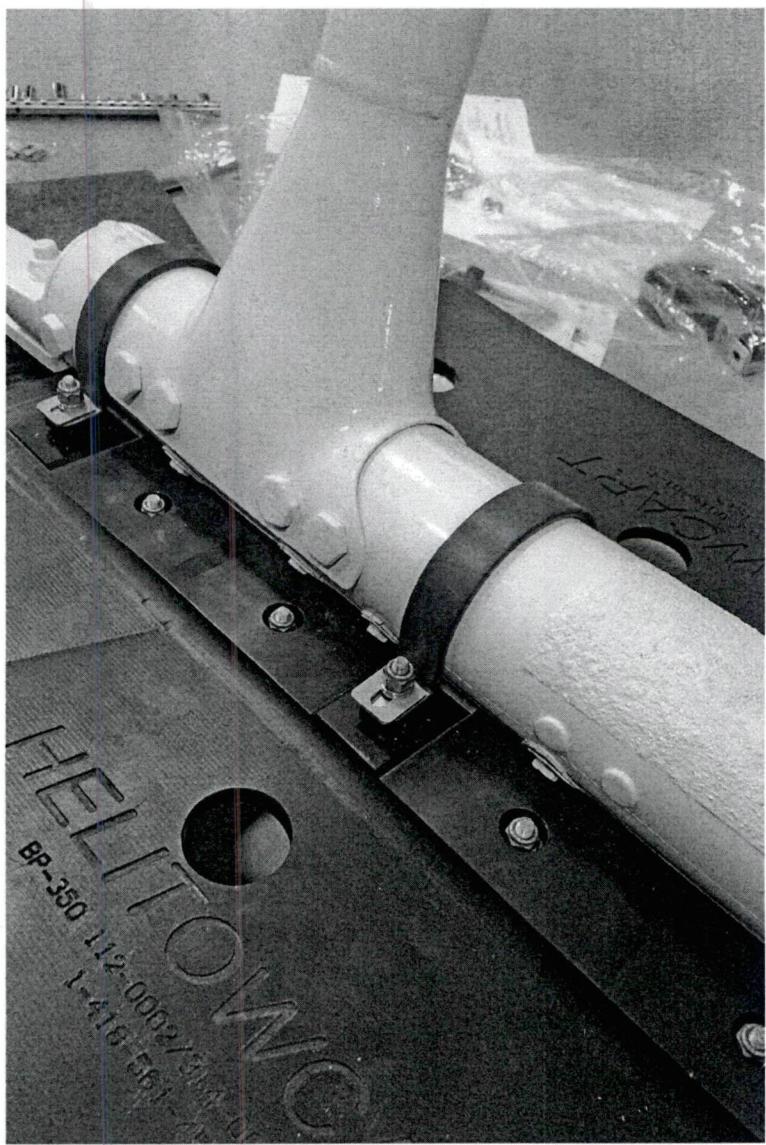
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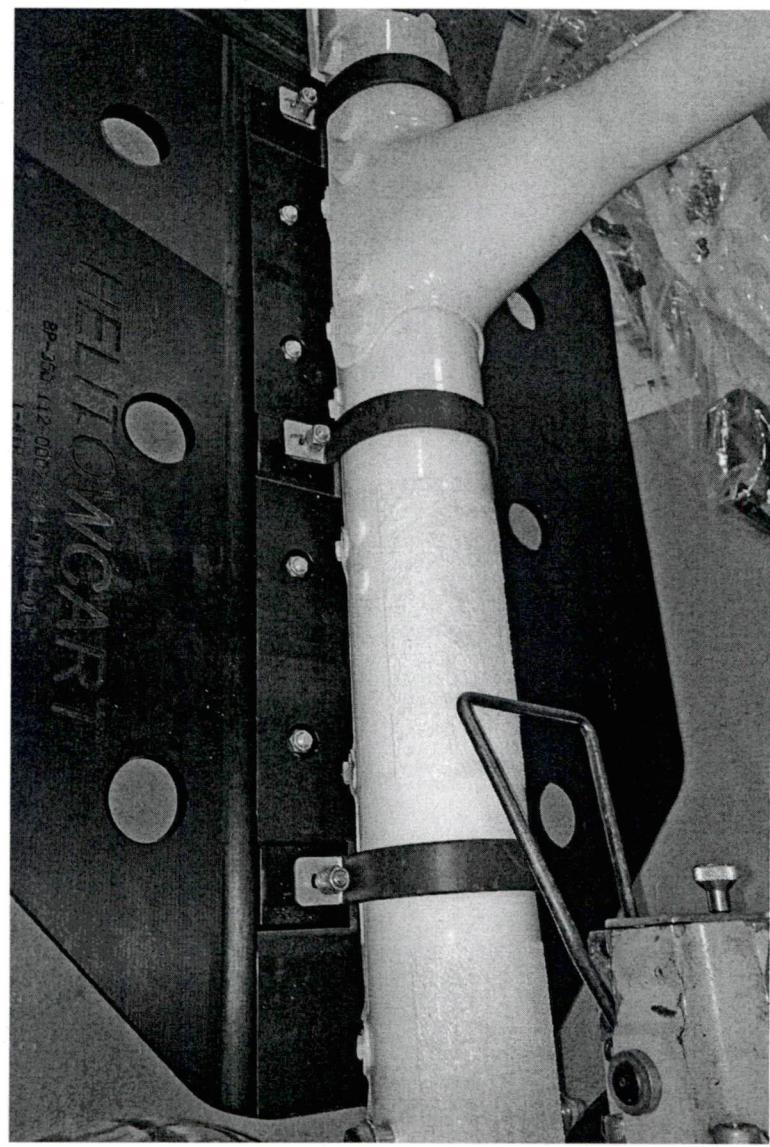
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Ainsi, il convient de faire preuve de diligence et de respect pour les destinataires.









Nathalie Barbeau

From: Claude Boule [CBoule@canadianhelicopters.com]
Sent: February-02-15 8:26 AM
To: nbarbeau@helitowcart.com
Subject: AS350 Beapaws, defect
Attachments: 001.jpg; 003.jpg; DART.jpg

Categories: Cat 1 - Needs important Action

Bonjour

Nous avons découvert que les Bearpaws ne pivotent pas à cause de la coupe parfaite au diamètre du skid tube , ne permet pas sa rotation, dont il accroche sur les bolts qui retiennent les wear shoes.

Un chamfrin devrait être fait (Dart on fait un diamètre de coupe plus grand)

Claude Boule
Aircraft Standards Manager Superviseur des Standards en Aéronef

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Direct 450-452-3025
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Facsimile 450-452-2483
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